UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

OGLALA SIOUX TRIBE,	)	
	)	
Petitioner,	)	No. 17-1059
	)	
v.	)	
	)	
UNITED STATES NUCLEAR REGULATORY COMMISSION and UNITED STATES OF AMERICA,	)	
	)	
Respondents.	)	
	)	

OGLALA SIOUX TRIBE'S RESPONSE TO
NUCLEAR REGULATORY COMMISSION'S MOTION TO DISMISS

Respondent Nuclear Regulatory Commission ("NRC" or "Commission") filed a Motion to Dismiss ("NRC Motion") on March 17, 2017 asserting that this Court lacks jurisdiction to hear the Petition for Review filed by the Oglala Sioux Tribe ("Tribe"), or in the alternative, that this Court should stay its proceedings in this case until the NRC conducts additional review under the National Environmental Policy Act ("NEPA") and National Historic Preservation Act ("NHPA"). The Tribe hereby responds to the NRC Motion and asserts that jurisdiction is proper to review a final order that confirmed NEPA and NHPA violations affecting the Tribe yet upholding the NRC grant of a still-effective license to mine and process uranium.

I. BACKGROUND AND PROCEEDINGS BELOW

This case arises from the Memorandum and Order, CLI-16-20, issued by the U.S. Nuclear Regulatory Commission on December 23, 2016 ("NRC Order"). *Powertech (USA), Inc.* (Dewey-Burdock *In Situ* Uranium Recovery Facility), CLI-16-20 (2016), 84 NRC __. The NRC Order of the three Commissioners included an opinion (*Id.* at 1-57), a dissenting opinion by Commissioner Kristine L. Svinicki taking issue with the merits of the ruling (*Id.* at 58-65), and a dissenting opinion by Commissioner Jeff Baran taking issue with the relief granted. (*Id.* at 66-67).

The NRC Order affirmed in whole a prior decision of the NRC-appointed Atomic Safety Licensing Board ("ASLB" or "Board") issued on April 30, 2015. *Powertech USA, Inc.* (Dewey-Burdock In Situ Uranium Recovery Facility), LBP-15-16, 2015 WL 7444635, 81 NRC 618 (2015). The ASLB reached its decision after a four-day evidentiary hearing and extensive briefing on the Tribe's contentions. The Board found that the Final Environmental Impact Statement ("FEIS"), Record of Decision ("ROD"), and Radioactive Materials License ("License") were issued and the License made effective without compliance with federal law. The NRC Order finalized the issuance of the fully effective license to Powertech (USA), Inc. despite the admitted lack of compliance with both NEPA as to the survey for, and analysis of impacts to, the Tribe's cultural resources present

at the proposed mine site, and the NHPA as to the failure to conduct lawful government to government consultation on the impacts, and mitigation of impacts, for cultural resources.

As summarized by the dissent contained in the NRC Order, "the Board found that the Staff's FSEIS did not meet the requirements of NEPA because the FSEIS was deficient with respect to the effects of the licensing action on Native American cultural, religious, and historic resources." NRC Order, Slip Op. at 66 (Baran Dissent). "The Board also identified a NEPA deficiency with respect to hydrogeological information, the subject of Contention 3, and conditioned Powertech's license to cure this deficiency." Id. at FN2.

The Tribe prevailed on several issues before the ASLB, and the final NRC Order upheld the ASLB findings. NRC Order, Slip. Op. at 2. The Tribe also administratively appealed to the NRC the ASLB's decision to leave the license in effect despite the acknowledged violations of NEPA and NHPA. *See e.g.* Oglala Sioux Tribe Petition for Review (March 26, 2015) at 18 *citing e.g.* New York v. NRC, 681 F.3d 471, 476 (D.C. Cir. 2012) (Oglala Sioux Tribe Petition for Review attached as Exhibit 1). The NRC Order affirmed the resulting license and left it in full force and effect. NRC Order, Slip. Op. at 33.

As the Baran dissent correctly sets out:

> the agency did not have an adequate environmental analysis at the time it decided whether to issue the license. In fact, the deficiencies in the NEPA

> analysis remain unaddressed today, and therefore the Staff still cannot make an adequately informed decision on whether to issue the license. The Staff's licensing decision was based on (and continues to rest on) an inadequate environmental review. As a result, the Staff has not complied with NEPA.

NRC Order, Slip Op. at 66 (Baran dissent at *1). The option of suspending or invaliding the effective uranium processing license, issued without compliance with NEPA and NHPA, was rejected by the NRC Order in favor of leaving the license in place. NRC Order, Slip. Op. at 33.

This appeal presents several other issues that were presented by the Tribe's contentions before the agency, but dismissed from detailed review by the ASLB. *See* Oglala Sioux Tribe Statement of Issues to be Raised [Doc # 1667832, filed 3/24/2017]. The ASLB's rulings dismissing the Tribe's contentions were appealed, but upheld by the NRC Order. *Id.*, Slip Op. at 1-57. Among the dismissed issues was the lack of meaningful environmental review under NEPA of the impacts from the proposed creation, temporary storage, and permanent disposal of radioactive waste. NRC Order, Slip Op. at 17 -18 (the "court's decision regarding continued storage has no bearing on this issue") *citing* New York v. NRC, 681 F.3d 471 (D.C. Cir. 2012).

The Oglala Sioux Tribe brings this appeal to, among other things, invalidate the license pending compliance with federal law and require NRC to conform to the procedural requirement "that an agency decisionmaker must consider an adequate environmental review *before* making a decision on a licensing action."

NRC Order, Slip Op. at 66 (Baran dissent) *citing* Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349 (1989)(italics in original). Without timely judicial review and relief, "this fundamental purpose of NEPA is frustrated" by the Commission decision to "supplement and cure an inadequate NEPA document *after* the agency has already made a licensing decision." Id., Slip Op. at 66 (Baran dissent at 1)(emphasis in original).

II. ARGUMENT

The Motion to Dismiss asserts that despite the issuance and affirmation of an effective license, the NRC has not issued a "final order" and thus this Court does not have jurisdiction to hear the Tribe's Petition under the Hobbs Act. *See* 28 U.S.C. § 2342(4). The NRC Motion concedes that numerous orders have issued, and the Tribe asserts that each became a "final order" upon the entry of the NRC Order that resolved all administrative appeals on December 23, 2016. For the reasons stated herein, the Tribe respectfully submits that Hobbs Act jurisdiction is properly invoked.

A. The Hobbs Act Provides Jurisdiction in this Case

The "Hobbs Act governs review of '[any] final order entered in any proceeding of the kind specified in subsection (a) [of section 2239].'" Fla. Power & Light Co. v. Lorion, 470 U.S. 729, 733 (1985) *quoting* 42 U.S.C. § 2239(a)(1). "Subsection (a) proceedings are those 'for the granting, suspending, revoking, or

amending of any license.'" Id. Review here is sought for orders filed in a "subsection(a)" proceeding, including a final order by staff granting a fully operative license, final orders by the ASLB refusing to hear contentions, a final order of the Commission that upheld the grant of the license and allowed the license to remain effective despite upholding the ASLB's adjudicated finding that NRC failed to meet its NEPA and NHPA duties.

The government focuses on the fact that the Commission's December 2016 adjudicatory decision (CLI-16-20) directed NRC Staff to conduct further narrow investigations on a subset of issues raised by the Tribe's Petition. The Commission imposed no deadline to complete these investigations. According to the Motion, this means that no part of the Order is final and thus cannot be challenged, even though the order affirms the grant of the license allowing uranium mining, processing, and radioactive waste disposal. The NRC position would effectively preclude Hobbs Act review of an effective license indefinitely, even where NRC adjudications twice confirmed the License was granted without compliance with applicable federal laws.

Without judicial review, NRC Staff is allowed an indefinite period to prepare *post hoc* rationalization to support an effective license the NRC confirmed was issued without NHPA/NEPA compliance, a result precluded by controlling authority cited by Commissioner Baran. NRC Order, Slip Op. at 66, FN 1 (dissent)

citing Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349 (1989). This Circuit has recently rejected *the create waste now, analyze disposal later* approach in reviewing the waste confidence rule. New York v. NRC, 681 F.3d 471 (D.C. Cir. 2012)(holding the "Commission did not calculate the environmental effects of failing to secure permanent storage").

This case is therefore properly filed under the Hobbs Act where NRC Staff granted a license and then the ASLB and Commission both issued orders finding the NRC Staff had violated NEPA and NHPA yet left the license to process uranium and create waste as remaining valid and effective.[1] The Tribe maintains

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[1] Contrary to NRC's too early/too late argument (NRC Motion at 13 n. 16), challenging the license is not time barred where this appeal was filed after exhausting NRC's administrative adjudications and obtaining a final order. Pub. Citizen v. Nuclear Regulatory Com., 901 F.2d 147, 152 (1990) (rejecting NRC timeliness argument that would create a "waste of everyone's time and resources") *accord* Honeywell Int'l v. NRC, 393 U.S. App. D.C. 340, 347, 628 F.3d 568, 575 (2010) ("The Court explained that "[a]bsent a firm indication that Congress intended to locate initial [Administrative Procedure Act ('APA')] review of agency action in the district courts, we will not presume that Congress intended to depart from the sound policy of placing initial APA review in the courts of appeals."). Further, this Court has held "that to the extent that an agency's action 'necessarily raises' the question of whether an earlier action was lawful, review of the earlier action for lawfulness is not time-barred. *Id.* at 1325; *see also* Cities of Batavia, Naperville, etc. v. FERC, 672 F.2d 64, 72 n. 15 (D.C. Cir. 1982) ("While *a petition from an agency order* cannot be filed after the statutory period for filing has run, it may be that *some of the issues* that might have been raised in that appeal are so inextricably linked to a subsequent agency opinion on another aspect of the same case, that those issues may be raised in a timely appeal from the second opinion.") (emphasis in original) *quoted by* Pub. Citizen v. Nuclear Regulatory Com., 901 F.2d 147, 151-52 (1990).

that because the December 2016 Order is final as to the grant of the license, it thereby gives rise to Hobbs Act review.

B. The NRC Motion Misconstrues the NRC Proceedings

The NRC Motion makes a series of segmented technical arguments that overlook the several tiers of agency decisionmaking culminating with the NRC Order that left an effective license in place despite confirmed violations of federal law.

First, the Motion brushes over a salient fact of this case – that the NRC Order affirmed the agency's issuance of the license to Powertech, which is immediately effective and allows Powertech to begin certain on-the-ground operations. As held by this Circuit, the issuance of a permit or license by the NRC authorizing operations qualifies as a "final order" subject to the review:

> The court has jurisdiction over 'all final orders of the [NRC] made reviewable by Section 2239 of title 42.' 28 U.S.C. § 2342 (Hobbs Act). Section 2239(a) permits review of '[a]ny final order' entered by the NRC in any proceeding 'for the granting, suspending, revoking, or amending of any license.'

City of Benton v. NRC, 136 F.3d 824, 825 (D.C. Cir. 1998). This is despite the fact that some additional proceedings remain before the agency. *See* Blue Ridge Environmental Defense League v. NRC, 668 F.3d 747, 757 (D.C. Cir. 2012)("order issued during ongoing administrative proceedings is reviewable … if, for example, it authorizes a plant operator to operate at full power pending further

review by the Commission"), *citing* Massachusetts v. NRC, 924 F.2d 311, 322 (D.C.Cir.1991).[2] Here, Hobbs Act finality of the NRC Order is confirmed where the Commission refused to suspend the granting of the license or otherwise limit authorizations in Powertech's license, despite the Tribe's specific appeal argument on this point (*See* Oglala Sioux Tribe Petition for Review at 18-19), and over Commissioner Baran's dissent.

Second, the fact that the Commission ordered staff to conduct additional administrative review related to a subset of issues raised by the Tribe – the acknowedleged failure of NRC staff to comply with NEPA and the NHPA in issuing the license to Powertech – does not mean that the Commission's Order is not final and reviewable. The Motion ignores the plain fact that the NRC Order resolved once and for all a number of issues and contentions raised by the Tribe. For instance, the Commission upheld the NRC Staff's compliance with NEPA with respect to the analysis of radioactive waste disposal (known as "11e2 byproduct material"), the impact of the thousands of historic abandoned bore holes at the site on ground water quality, the NRC Staff's analysis of baseline water quality at the site, the consequence of NRC Staff's failure to properly conduct a NEPA-

[2] Although these cases deal with the "immediate effectiveness" of permits for nuclear reactors, the focus on whether NRC has authorized on-the-ground operations, which the Commission's Order does here, is the critical determination for finality.

compliant scoping process for the environmental review, and the NRC Staff's analysis of potential mitigation measures, including those for impacts to culutral resources for which no survey has even been conducted. No further review will occur on these issues.

Moreover, the NRC has finalized its environmental impact statement in this case and "since the final EIS already has been published, [judicial] review will not disrupt the process of adjudication." Envtl. Law & Policy Ctr. v. United States NRC, 470 F.3d 676, 681 (7th Cir. 2006). "Consequently, the order is final and appealable under 28 U.S.C. § 2342." Id.

Thus, the NRC Order satisfies the Supreme Court's two-part test for "final agency action" under the APA and the Hobbs Act. ''First, the action must mark the consummation of the agency's decisionmaking process—it must not be of a merely tentative or interlocutory nature. And second, the action must be one by which rights or obligations have been determined, or from which legal consequences will flow.'' Bennett v. Spear, 520 U.S. 154, 177-178 (1997).

C. The NRC Motion Misconstrues Controlling Authority

Read in context with the proceedings below, the NRC Motion ignores relevant precedent and relies upon authority that does not support its request to dismiss or delay the Tribe's timely request for judicial review.

The Motion ignores the Supreme Court's most recent ruling on what constitutes "final agency action." In Army Corps of Engineers v. Hawkes, 136 S.Ct. 1807 (2016), the Court held the finality test is met when an agency determines the rights and obligations of property owners under the Clean Water Act despite the fact that the final permit, or permit denial, had yet to be issued. The CWA determination consummated the decisionmaking process because the agency conducted "extensive factfinding" and "ruled definitively" that the property had the "physical and hydrological characteristics" of jurisdictional waters and thus was subject to regulation under the CWA. Id. at 1813. The Court additionally held that, despite the fact that the final permit had yet to be issued and further administrative proceedings would occur, the agency's determination that the property was subject to the CWA "gives rise to 'direct and appreciable legal consequences,' thereby satisfying the second prong of Bennett." Id. at 1814.

The finality of the NRC Order in this case is even more pronounced than in Bennett and Hawkes. The Commission made detailed and specific factual and legal findings regarding the Tribe's contentions, rejecting all but two, and affirmed as a final decision of the Commission the issuance of a license to Powertech that remains in full force and effect.

None of the cases relied upon by the government, Motion at 8-9, deal with the situation here – the Commission's affirmance and final decision to issue a

license to begin operations. In Clifton Power Corp. v. FERC, 294 F.3d 108, 112 (D.C. Cir. 2002), the court ruled that a challenge to a civil penalty was premature during the pendency of the petitioner's motion to reconsider that penalty. In Public Citizen v. NRC, 845 F.2d 1105, 1109 (D.C. Cir. 1988), the suit was filed before the challenged decision, a denial of a rulemaking petition, was even issued. In TeleSTAR, Inc. v. FCC, 888 F.2d 132, 133-34 (D.C. Cir. 1989), similar to Clifton Power, a challenge to an agency decision was unripe due to the filing of a request for reconsideration of that decision. In CSX Transp., Inc. v. Surface Transp. Bd., 774 F.3d 25, 28 (D.C. Cir. 2014), this Court did not have jurisdiction under the Hobbs Act because the agency "had issued no adverse ruling." Lastly, the Motion's reliance on Adenariwo v. Federal Maritime Commission, 808 F.3d 74, 78 (D.C. Cir. 2015), merely restates the accepted caselaw on finality, noting that a "final order" is "one by which rights or obligations had been determined or from which legal consequences would flow." That is exactly what happened when the Commission issued its Order affirming the effectiveness of the license granted to Powertech, and rejecting as a final matter most of the Tribe's contentions.

Although some limited NRC staff work remains, there is no question that the Commission's Order marks the end of the administrative process for a number of issues. "Normally in an adjudication a final order is one that disposes of all issues as to all parties." Natural Resources Defense Council, Inc. v. NRC, 680 F.2d 810,

815 (D.C. Cir. 1982). Yet that is not the case when a license has been issued. "[A] final order in a licensing proceeding under (42 U.S.C.) s 2239(a) would be an order granting or denying a license." Id.

Importantly, a fundamental legal contention by the Tribe – that the agency cannot issue a license when it admits that the Final EIS issued as support for the license decision violates NEPA and the NHPA – is also final and will not be subject to any further Commission ruling.[3] There is no question that the Commission's final ruling on this crticial issue, and the resulting affirmance of the issuance of the license "gives rise to direct and appreciable legal consequiences" to both Powertech and the Tribe, Hawkes, 136 S.Ct. at 1814, as it authorizes Powertech to commence on-the-ground operations – to the detriment of the Tribe's interests in, and uses of, the affected lands.[4]

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[3] The fact agency staff was ordered to conduct further reviews to support issuance of the license does not change this issue, as the Commission's decision to validate the license, despite an inadequate and illegal EIS, will not be revisited by the Commission.

[4] The fact that other permits from other agencies or subsequent internal (non-public) technical NRC Staff review may or may not still be required prior to some on the ground activities does not make the license issuance less "final." As the NRC gave no time frame or limitations on any subsequent NRC Staff review of the NEPA and NHPA violations, there is no assurance that NRC Staff will remedy the violations identified by the ASLB and NRC Order before specific on the ground activities are carried out as currently authorized by the active and effective license. The terms of the license, on its face, demonstrate approval for uranium mining operations. *See* April 8, 2014 Materials License No. SUA-1600, Docket No. 040-09075, to Powertech (USA) Inc. (Attachment 2).

Thus, the government's argument that this Court's review would be "a waste of judicial time and effort" (Motion at 14), does not hold true in this case. The Motion's reliance on Alaska v. FERC, 980 F.2d 761, 764 (D.C. Cir. 1992), is misplaced. There, the court noted that judicial review would be premature as "[f]uture developments at the trial may fully satisfy the party seeking to prosecute the interlocutory appeal, thus rendering the appeal moot or insignificant and, in either case, a waste of judicial time and effort." Id.

That is not the situation here, as the Commission issued its final ruling on critical issues such as the legality of issuing the license when the EIS is admittedly inadequate under NEPA and the NHPA. No further review will occur on these issues. Indeed, in Alaska, this Circuit noted "exceptions" to the policy disfavoring judicial review while some aspects of the case are still before the agency. Id. Such exceptions include "when a party will irreparably lose important rights unless an immediate appeal is permitted; or when the matter decided is clearly separate from the balance of the lawsuit and there would be no advantage in postponing review; or when an interlocutory appeal will materially advance ultimate termination of the litigation." Id.

A number of these exceptions apply here. There is no question that the Tribe "will irreparably lose important rights," as the Commission has affirmed the issuance of the initiation of Project operations on lands containing cultural and

religious resources and uses of great importance to the Tribe and its members. Further, the issue of whether a license can issue in the face of an illegal EIS, along with other matters finally determined by the Commission (such as the ruling allowing the agency to postpone analysis of the environmental impacts from the transport and disposal of contaminated uranium processing waste) are "clearly separate from the balance of the lawsuit and there would be no advantage in postponing review." Id.

Lastly, this Court's review of these issues at this time will "materially advance ultimate termination of the litigation," Id., because a ruling, either way, will determine whether issuance of the license, and the associated EIS, complied with federal law. The limited further agency staff actions ordered by the Commission in the meantime will not change these issues or the result of the Commission's final legal and factual determinations contained in the December 2016 Order.

III. CONCLUSION

The Tribe respectfully submits that the NRC Motion be denied, and that Hobbs Act review on the orders, including the effective license NRC granted without NEPA and NHPA complance, proceed without delay.

Circuit Rule 27(e) Request for Oral Arugument

While Circuit Rule 27(e) specifies that oral argument may be held on a Motion only where ordered by the Court, the Tribe respectfully submits that oral argument may materially assist the Court in this instance.

Respectfully submitted,

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Filed this 24th day of March, 2017.

CERTIFICATE OF COMPLIANCE

I, Jeffrey C. Parsons, hereby certify that the foregoing Response to Motion to Dismiss complies with the formatting and type-volume restrictions of the rules of the U.S. Court of Appeals for the District of Columbia Circuit. The motion was prepared in 14-point, double spaced, Times New Roman font, using Microsoft Word 2016, in accordance with Fed. R. App. P. 32(a)(5) and Fed. R. App. P. 32(a)(6). The response contains 3660 words and therefore complies with Fed. R. App. P. 27(d)(2)(A).

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CERTIFICATE OF SERVICE

I, Jeffrey C. Parsons, hereby certify that the foregoing Response to Motion to Dismiss was served on all counsel of record in case number 17-1059 through the electronic filing system (CM/ECF) of the U.S. Court of Appeals for the District of Columbia Circuit.

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ATTACHMENT 1

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of	)	
	)	
POWERTECH (USA) INC.,	)	Docket No. 40-9075-MLA
	)	ASLBP No. 10-898-02-MLA-BD01
(Dewey-Burdock In Situ Uranium Recovery Facility)	)	May 26, 2015

OGLALA SIOUX TRIBE'S PETITION FOR REVIEW OF LPB-15-16 AND DECISIONS FINDING TRIBAL CONTENTIONS INADMISSIBLE

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Pursuant to 10 C.F.R. §§ 2.1212 and 2.341, Intervenor Oglala Sioux Tribe ("OST" or "Tribe") hereby submits this Petition for Review.

I. INTRODUCTION

This Petition for Review seeks Commission review of orders issued by the Atomic Safety Licensing Board ("ASLB" or "Board") that deny some of the Tribe's contentions on the merits, award limited relief on the Tribe's successful contentions, and find some Tribal contentions inadmissible. As detailed herein, the Tribe seeks review of 1) ASLB's rejection of requests for hearing on contentions in the Board's Memorandum and Order (Ruling on Petitions to Intervene and Requests for Hearing) dated August 5, 2010 (LBP-10-16), 72 NRC 361 (2010); 2) ASLB's rejection of requests for hearing on contentions in the Board's Memorandum and Order (Ruling on Proposed Contentions Related to the Draft Supplemental Environmental Impact Statement) dated July 22, 2013 (LBP-13-09), 78 NRC 37 (2013); 3) ASLB's rejection of the requests for hearing on contentions in the Board's Memorandum and Order (Ruling on Proposed Contentions Related to the Final Supplemental Environmental Impact Statement) dated April 28, 2014 (LBP-14-5), 79 NRC 377 (2014); and 4) ASLB's rejection of the requests for hearing on contentions in the Board's Partial Initial Decision dated April 30, 2015 (LPB-15-16)(ML15068A281). Finally, the Tribe seeks review of the ASLB's rulings in LPB-15-16 in favor of the NRC Staff and Powertech (U.S.A.) Inc. ("Powertech" or "Applicant") on the merits of Contentions 2, 3, and 6, and the relief granted the Tribe that fails to remedy NRC Staff violations with respect to Contentions 1A and 1B.

In accordance with NRC regulations, this Petition contains the requisite discussion for each "substantial question" presented for review: (i) A concise summary of the decision or action of which review is sought; (ii) A statement (including record citation) where the matters of fact or law raised in the petition for review were previously raised before the presiding officer and, if

they were not, why they could not have been raised; (iii) A concise statement why in the petitioner's view the decision or action is erroneous; and (iv) A concise statement why Commission review should be exercised. 10 C.F.R. § 2.341(b)(2), (4).

This case involves Powertech's application to conduct In Situ Recovery (ISR) mining in Custer and Fall River Counties, South Dakota. The proposed mine is within the ancestral land of the Oglala Sioux Tribe and threatens the Tribe's cultural and groundwater resources, among other substantial impacts. As a result, the Oglala Sioux Tribe petitioned for, and was granted, intervention in the proceeding, along with individuals and organizations collectively referred to as the Consolidated Intervenors. The Tribe was granted standing by the ASLB, which admitted several contentions based on Powertech's application materials as well as the subsequent Draft and Final Supplemental Environmental Impact Statement (DSEIS and FSEIS). The ASLB also excluded a number of the Tribe's contentions as inadmissible.

The ASLB held a multi-day adjudicatory hearing on August 19-21, 2014 in Rapid City, South Dakota. During the hearing, it was established that Powertech had failed to disclose a substantial amount of geological data in the form of borehole logs from thousands of holes and wells drilled in the project area. The ASLB ordered the production of the data and provided a narrow opportunity for additional testimony related to the newly-disclosed information.

The ASLB issued a Partial Initial Decision on April 30, 2015 resolving seven admitted contentions, five in favor of the NRC Staff and Powertech, and two in favor of the Tribe and Consolidated Intervenors. This Petition for Review seeks Commission review of three contentions resolved in favor of NRC Staff and Powertech, four of the contentions the ASLB excluded from the proceedings as inadmissible, and two contentions on which the Tribe prevailed, but the ASLB did not provide effective relief.

II. CONTENTIONS IMPROPERLY HELD INADMISSIBLE

Commission precedent establishes that the Commission will generally defer to the ASLB's contention admissibility rulings unless the appeal points to "an error of law or abuse of discretion." *South Carolina Electric & Gas Co.* (Virgil C. Summer Nuclear Station, Units 2 and 3), CLI-10-21, 72 NRC 197, 200 (2010) (citing *Crow Butte Resources, Inc.* (In Situ Leach Facility, Crawford, Nebraska), CLI-09-9, 69 NRC 331, 336 (2009)). When assessing the exclusion of NEPA contentions, ASLB's exercise of discretion undergoes "reasonableness review," as opposed to the less demanding abuse of discretion standard. *San Luis Obispo Mothers for Peace v. NRC*, 449 F.3d 1016, 1035 (9th Cir. 2006)(upholding exclusion of Atomic Energy Act contentions, and reversing exclusion of NEPA contention).

A. Contentions Regarding Lack of Analysis of Impacts of 11e2 Byproduct Waste Disposal

In its Memorandum and Order (Ruling on Petitions to Intervene and Requests for Hearing) dated August 5, 2010 (LBP-10-16)(ML102170300), at 75-78, the ASLB ruled inadmissible the Tribe's Contention 7 asserting a failure to include in the Application material a reviewable plan for disposal of 11e2 Byproduct Material. In doing so, the Board erred at law and abused its discretion.

The ASLB held that the Tribe had not successfully articulated a contention because it had "not identified a regulation that requires a disposal plan be included in an application." *Id.* at 77-78. However, the Tribe asserted that 10 C.F.R. § 40.31(h), and 10 C.F.R. Part 40, Appendix A, Criteria 1 and 2 require the applicant to present a plan in its application for the disposal of 11e2 Byproduct Material. *Id.* at 76-77. The ASLB based its ruling of inadmissibility on a finding that neither 10 C.F.R. § 40.31(h) nor 10 C.F.R. Part 40, Criterion 1 applies to ISL mines. LBP-10-16 at 77. The ASLB further held that while 10 C.F.R. Part 40, Appendix A, Criterion 2 does apply to ISL mines and does require that byproduct material from in situ extraction operations

"must be disposed of at existing large mill tailings disposal sites," somehow the applicant in this case was not required to provide any plan in the application for 11e2 Byproduct Material disposal. *Id.* at 77. The Tribe further demonstrated that NUREG-1569 specifically discusses the need for a site-specific waste disposal plan. Reply to NRC Staff and Applicant Responses to the Petition to Intervene and Request for Hearing of the Oglala Sioux Tribe at 39-40 (ML101340870).

The ASLB further disregarded the Tribe's allegation that the environmental report failed to meet the standards of the National Environmental Policy Act, because in the ASLB's view "it is settled law that an applicant is not bound by NEPA, but by NRC Regulations in Part 51." LBP-10-16 at 78. However, 10 C.F.R. § 2.309(f)(2) specifically states that "[o]n issues arising under the National Environmental Policy Act, participants shall file contentions based on the applicant's environmental report." Thus, the Board's ruling was in direct conflict with applicable regulations and federal court precedent and presents a "substantial question" for review. The Tribe's pleading contained all of the requirements of 10 C.F.R. § 2.309(f)(1). *See* OST Motion to Intervene (ML100960645) at 31-34 and OST Reply (ML101340870) at 34-41.

The presence of a "substantial question" is confirmed by the ASLB's express recognition of "the importance of planning for waste disposal at any NRC regulated facility" and the ASLB's explicit "concern" with its ruling that this issue need not be addressed at the license application stage. LBP-10-16 at 77. Although ASLB excluded Contention 7, the Board recommended "that this issue be considered by the Commission (or Board) when it conducts the mandatory review and hearing that must be held in this case." *Id.* The Tribe asserts that this important issue presents the type of "substantial question" that requires review by the Commission and further asserts that "reasonableness review" will confirm admission of the Tribe's contention that

application requirements must be interpreted as expressly including information on disposal of radioactive wastes. *San Luis Obispo Mothers for Peace*, 449 F.3d at 1035 (9th Cir. 2006).

The Tribe raised this contention again upon issuance of the Draft Supplemental Environmental Impact Statement (DSEIS). At that time, the Board rejected the contention based on a finding that it was solely a contention of omission, that the DSEIS had generally identified the White Mesa Uranium Mill in Utah as the likely disposal site for its waste, and the Generic Environmental Impact Statement (GEIS) discusses disposal generally, and as such the contention was moot. LPB-13-09 at 42. This holding is contrary to law and an abuse of discretion because the Tribe's argument clearly identified the "lack of analysis of a plan for disposal of 11e2 byproduct material" that was site-specific to the Dewey-Burdock mine proposals. OST Reply on DSEIS Contentions at 15 (ML13084A453)(emphasis added). Thus, the alleged deficiency not only involved the failure to confirm an available location for disposal or generalized impacts, but the necessary site-specific analysis of the direct, indirect, and cumulative environmental impacts associated with the transportation, care, and disposal of the waste from this proposed mine. Tribe Statement of DSEIS Contentions at 29 (ML13026A004). Identification of the White Mesa Mill as a possible disposal site did not moot this asserted lack of analysis. The fact that the Generic Environmental Impact Statement makes general references to waste disposal requiring a dedicated facility also does not address the lack of such a plan for the Dewey-Burdock project.

Further, the ASLB found the contention inadmissible simply because the draft license contained a provision requiring the applicant to establish a disposal plan at some point in the future. This is precisely the type of omission raised by the Tribe. Thus, the Board was wrong to find this contention moot and wrong not to admit this contention in the proceeding. The ASLB's error is analogous to the Waste Confidence Decision where NRC "fail[ed] to properly analyze the environmental effects of its permanent disposal conclusion." *New York v. NRC*, 681 F.3d

471, 478 (D.C. Cir. 2012). The ASLB's rejection of the 11e2 Byproduct Material disposal contention also presents a "substantial question" analogous to the Court's rejection of the "Commission's conclusions regarding temporary storage because the Commission did not conduct a sufficient analysis of the environmental risks." *Id.* at 483.

The Tribe raised this important issue yet again in association with the Final SEIS, but the ASLB summarily rejected that contention as not based on materially different information, finding that because the DSEIS had identified the White Mesas Uranium Mill as a possible waste disposal site, the issue was not preserved. LPB-14-5 at 24.

In this way, NRC Staff and ASLB have approved the creation and possession of 11e2 Byproduct Material without any site-specific plan and analysis of disposal of its 11e2 Byproduct Material wastes, and the applicant has been able to maneuver through the entire licensing process avoiding any close scrutiny of this issue. This issue is of great importance because, as argued by the Tribe in its pleadings, the White Mesa Uranium Mill does not currently have permitted capacity to accept these wastes, and has no public plans to do so. Tribe Statement of FSEIS Contentions at 35-36 (ML14077A004). The reversal of the Waste Confidence Decision confirms the "substantial question" presented by the ASLB exclusion of this contention challenging a similar failure to address disposal of 11e2 Byproduct Materials.

Where the ASLB noted the Commission should recognize the importance of the waste disposal issue, the Tribe respectfully submits that review is properly taken to confirm that NEPA and NRC regulations require that all waste disposal impacts be fully addressed before issuing a license that irreversibly commits resources necessary for "the disposition" and perpetual care of 11e2 Byproduct Material "resulting from such milling activities." OST Petition to Intervene at 31 (ML100960645) *quoting* 10 C.F.R. Part 40 Appendix A.

B. Contention Regarding Scoping

In its July 22, 2013 Memorandum and Order (Ruling on Proposed Contentions Related to the Draft Supplemental Environmental Impact Statement)(LBP-13-09), 78 NRC 37 (2013), the ASLB found inadmissible the Tribe's proposed Contention 8 asserting NRC Staff failed to conduct NEPA's mandatory scoping process. LBP-13-09 at 46. Specifically, the Board ruled that 10 C.F.R. § 51.26(d) applies and when a supplement to an EIS is prepared, "NRC staff need not conduct a scoping process," and that scoping meetings on the Generic Environmental Impact Statement (GEIS) satisfied NEPA's scoping requirement. *Id* at 46-47.

The Board's ruling is contrary to law. The exception contained in 10 C.F.R. § 51.26(d) does not apply to site-specific EISs, such as the one at issue here, simply because NRC Staff labels it as a "supplement." NEPA terminology confirms that NRC Staff is "tiering" to a GEIS, which is allowable. However, "tiering" does not render site-specific EIS a "supplement" within the meaning of NEPA or 10 C.F.R. § 51.92 which only allows site-specific "supplements" to a site-specific EIS.

The Board's reliance on 10 C.F.R. § 51.26(d) to eliminate the requirement to conduct scoping has been specifically addressed and disavowed by the NRC Office of Inspector General (OIG)'s Audit Report titled "Audit of NRC's Compliance With 10 CFR Part 51 Relative to Environmental Impact Statements" OIG-13-A-20 (August 20, 2013). The OIG's Audit Report concluded, with specific reference to the Dewey-Burdock project, that "NRC did not fully comply with the scoping regulations because of incorrect understanding of the regulations related to scoping for EISs that tier off of a generic EIS." OIG-13-A-20 at 24. The OIG Audit identifies the specific error NRC Staff commits as "refer[ring] to the tiered site-specific EIS as a 'supplement' to the generic EIS, leading to the belief that the exception in 10 C.F.R. 51.26(d) applies to tiered EISs." *Id.* The Audit Report discusses this issue in depth, illuminating the

substantial policy issues and the resulting limited scope of NEPA analysis presented by this contention. *Id.* at 17-26. Thus, the Board wrongly denied the Tribe its opportunity for a hearing on this issue. At minimum, the strong OIG condemnation of NRC Staff practice, which the Board ruling followed, demonstrates a "substantial issue" for review.

The Tribe specifically argued that the NEPA process in this case was conducted without benefit of a scoping process. List of Contentions of the OST Based on the DSEIS at 32-33 (ML13026A004). The Tribe argued that the NRC Staff position that the exception in 10 C.F.R. § 51.26(d) applied to the Dewey-Burdock "supplement" was legally flawed. OST Consolidated Reply at 17-18 (ML13086A523). The Tribe identified the consequences of forsaking site-specific scoping, denying the Tribe the opportunity, among other things, to provide input to help define the proposed action, identify significant issues to be analyzed in depth, provide input on alternatives that NRC Staff proposed to eliminate from study, and ensure that other environmental review and consultation requirements related to the proposed action be prepared concurrently and integrated with the DSEIS. 40 C.F.R. § 51.29(a)(1)-(5). The ASLB legal error also denied the Tribe the benefit of 40 C.F.R. § 51.29(b), which requires that NRC Staff "will prepare a concise summary of the determinations and conclusions reached, including the significant issue identified, and will send a copy to each participant in the scoping process." In this case, no such summary was prepared.

The illegally truncated scoping process deprived the Tribe of the opportunity to present its concerns at the proper time ("as soon as practicable")(§ 51.29(a)) and to have significant issues identified and addressed when NRC Staff created the scope of the NEPA process.

C. Contention Regarding Additional Borehole Data

In LPB-15-16, the ASLB ruled inadmissible the Tribe's proposed New Contention 1: The NRC Staff's Review of Newly-Disclosed Borehole Data was Inadequate Under, and Failed to

Comply with, the National Environmental Policy Act and Implementing Regulations. In doing so, the ASLB held that "[t]he results of the review by both the NRC Staff and the Oglala Sioux Tribe of Powertech's newly disclosed well log data did not 'paint a seriously different picture of the environmental landscape'" and as a result "does not give rise to a genuine issue in dispute." LPB-15-16 at 108.

However, the ASLB ruling misstates the law in that it conflates the contention admissibility standard with the substantive standard of whether the new information would require a supplement to the NEPA documents. The ASLB misapplied the contention pleading rules to require that the Tribe demonstrate, without the benefit of any of the hearing process, that the Tribe would prevail on the merits of the contention that plead a violation of the NEPA process. By ruling on the merits of the ultimate question presented when denying the Tribe the ability to develop and present its case on this contention, ASLB abused its discretion. It is well recognized that, "in passing on the admissibility of a contention . . . it is not the function of a licensing board to reach the merits of [the] contention." *Sierra Club v. NRC*, 862 F.2d 222, 226 (9th Cir. 1988) (citations omitted); *Crow Butte Res.*, 2009 WL 1393858 *1, *14 (May 18, 2009) ("[w]hether a [petitioner] has proved its claim is not the issue at the contention pleading stage"); *In the Matter of Duke Power Co.*, 9 NRC 146, 151 (1979).

Further, the ASLB errs in its conclusion that the newly-disclosed data did not "paint a seriously different picture of the landscape." Indeed, the testimony submitted by Dr. Hannan LaGarry (Exhibit OST-029)(ML14325A866) demonstrated that the data shows significant problems associated with the geologic setting that were not evaluated or reviewed in any NEPA document. For instance, Dr. LaGarry found evidence within the project area of 140 open, uncased holes, 16 previously cased, redrilled open holes, 4 records of artesian water, 13 records of holes plugged with wooden fenceposts, 6 records of holes plugged with broken steel, and 12

records of faults within or beside drilled holes. Exhibit OST-029 at 2. The ASLB's denial of the Tribe's request to develop and present this contention presents a substantial question, particularly where the contention was rejected despite the confirmed failure of the applicant to disclose the unlawfully withheld data. See Post-Hearing Order dated September 8, 2014 (ordering disclosure of withheld documents, denying request for 10 C.F.R. § 2.336(e)(1) sanctions, and holding Powertech request to reconsider "mandatory disclosure of data relevant to admitted contentions [as] without merit.")(ML14251A377).

Lastly, the ASLB failed to provide any support for its factual conclusion that the random "spot check" methodology employed by NRC Staff in reviewing the new-disclosed borehole data is supportable because the NRC Staff allegedly "spot checked" data earlier in the proceedings. In rejecting the contention, the ASLB asserted without any support or citation to any evidence in the record that the "spot check" technique "is not new or a materially different approach relative to this proceeding." LPB-15-16 at 108. To the contrary, Dr. LaGarry opined that the NRC Staff's use of "spot checks" instead of analysis was not evident in earlier NRC Staff reviews. Dr. LaGarry provided further expert testimony that "spot check" is not a reliable methodology and is not in keeping with established scientific standards. Exhibit OST-029 at 4-5 (¶¶ 6-11)(ML14325A866).

D. Contention Regarding EPA Preliminary Assessment

In LPB-15-16, the ASLB also held inadmissible the Tribe's New Contention 2: The NRC Staff NEPA Analysis Fails to Adequately Address or Review the Findings in the EPA's CERCLA Preliminary Assessment or the EPA's Reasonably Foreseeable CERCLA Removal Action. The ASLB ruled that the Tribe had failed to present a genuine dispute as to a material issue of law or fact, asserting that the FSEIS reviewed all of the issues raised by the EPA documents. LPB-15-16 at 109.

However, the ASLB erred where neither the FSEIS nor any of the NRC Staff testimony contains any review of the new disclosure made by the EPA document that contaminated water is leaking from the unreclaimed uranium mines into groundwater at the site and nearby ground water wells. Exhibit OST-026 at 30 (ML14311B007). The EPA identified a new contamination pathway with implications for pollution containment at the site that is not addressed in the application, any NRC materials, or the FSEIS. The ASLB simply glossed over this critical issue, relying on NRC Staff testimony that the FSEIS discussed the unreclaimed mines, but failing to recognize that none of that discussion includes any disclosure, analysis, or review of the contamination pathway from the unreclaimed mines to the groundwater. As such, the existing scope of review is insufficient, thus establishing a genuine issue of material fact and law that presents a "substantial question" of the propriety of ALSB rejecting this NEPA contention.

III. CONTENTIONS RULED UPON IN ERROR

A. Legal Framework

The contentions subject to this Petition involve allegations of violations of the National Environmental Policy Act (NEPA) and the National Historic Preservation Act (NHPA).

1. National Environmental Policy Act

NEPA is an action-forcing statute applicable to all federal agencies. Its sweeping commitment is to "prevent or eliminate damage to the environment and biosphere by focusing government and public attention on the environmental effects of proposed agency action." *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 371 (1989). The statute requires "that the agency will inform the public that it has indeed considered environmental concerns in its decision making process." *Baltimore Gas and Electric Company v. NRDC*, 462 U.S. 87, 97 (1983). The United States Supreme Court has explained that the government must disclose and take a "hard look" at the foreseeable environmental consequences of its decision in a NEPA

document. *Kleppe v. Sierra Club*, 427 U.S. 390, 410 n.21 (1976); *Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402, 416 (1971).

Closely related to NEPA's "hard look" mandate, NEPA prohibits reliance upon conclusions or assumptions that are not supported by scientific or objective data. *Citizens Against Toxic Sprays, Inc. v. Bergeland*, 428 F.Supp. 908 (1977). "Unsubstantiated determinations or claims lacking in specificity can be fatal for an [environmental study] …. Such documents must not only reflect the agency's thoughtful and probing reflection of the possible impacts associated with the proposed project, but also provide the reviewing court with the necessary factual specificity to conduct its review." *Committee to Preserve Boomer Lake Park v. Dept. of Transportation*, 4 F.3d 1543, 1553 (10th Cir. 1993).NEPA's implementing regulations require agencies to:

> [I]nsure the professional integrity, including scientific integrity of the discussions and analysis in environmental impact statements. [Agencies] shall identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement.

40 C.F.R. § 1502.24 (Methodology and Scientific Accuracy). Further, where data is not presented in the NEPA document, the agency must justify not requiring that data to be obtained. 40 C.F.R. § 1502.22.

CEQ regulations require that: "NEPA procedures must ensure that environmental information is available to public officials and citizens **before** decisions are made and **before** actions are taken." 40 C.F.R. § 1500.1(b)(emphasis added). As the federal circuit courts have held:

> NEPA ensures that a federal agency makes informed, carefully calculated decisions when acting in such a way as to affect the environment and also enables dissemination of relevant information to external audiences potentially affected by the agency's decision. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989). ... NEPA documentation notifies the public and relevant government officials of the proposed action and its environmental consequences and informs the public that the acting agency has considered those consequences.

Catron County Board of Commissioners v. U.S. Fish and Wildlife Service, 75 F.3d 1429, 1437 (10th Cir. 1996). The statutory prohibition against taking agency action before NEPA compliance applies to NRC decisionmaking. 42 U.S.C. § 4332(2)(C) *cited by New York v. NRC*, 681 F.3d 471, 476 (D.C. Cir. 2012). Otherwise, NEPA's mandate that agencies "shall [...] utilize a systematic, interdisciplinary approach" is reduced to an after-the-fact formality. 42 U.S.C. § 4332(2)(A).

NEPA also requires that all connected, similar and cumulative actions be considered in the same environmental review. NEPA defines connected actions as those which are "closely related," including those that "[c]annot or will not proceed unless other actions are taken," or those that are "interdependent parts of a larger action and depend on the larger action for their justification." 40 C.F.R. § 1508.25(a)(1). Cumulative actions are those that "have cumulatively significant impacts and should therefore be discussed in the same impact statement." *Id.* at § 1508.25(a)(2). Similar actions include those that have "common timing or geography." *Id.* at § 1508.25(a)(3).

A federal agency may not simply claim that it lacks sufficient information to assess the impacts of its actions. The courts are very clear with respect to an agency's statements in a NEPA document that "[a] conclusory statement unsupported by empirical or experimental data, scientific authorities, or explanatory information of any kind not only fails to crystallize the issues, but affords no basis for a comparison of the problems involved with the proposed project and the difficulties involved in the alternatives." *Seattle Audubon Society v. Moseley*, 798 F. Supp. 1473, 1479 (W.D. Wash. 1992), *aff'd* 998 F.2d (9th Cir. 1993).

NEPA requires that mitigation measures be reviewed in the NEPA process. "[O]mission of a reasonably complete discussion of possible mitigation measures would undermine the 'action forcing' function of NEPA. Without such a discussion, neither the agency nor other

interested groups and individuals can properly evaluate the severity of the adverse effects." *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 353 (1989), *accord New York v. NRC*, 681 F.3d 471, 476 (D.C. Cir. 2012). NEPA regulations require that an EIS: (1) "include appropriate mitigation measures not already included in the proposed action or alternatives," 40 C.F.R. § 1502.14(f); and (2) "include discussions of: . . . Means to mitigate adverse environmental impacts (if not already covered under 1502.14(f))." 40 C.F.R. § 1502.16(h). In a similar case involving the Forest Service, the federal courts ruled:

> The Forest Service's perfunctory description of mitigation measures is inconsistent with the "hard look" it is required to render under NEPA. "Mitigation must be discussed in sufficient detail to ensure that environmental consequences have been fairly evaluated." *Carmel-By-The-Sea v. Dept. of Transportation*, 123 F.3d 1142, 1154 (9th Cir. 1997) (*quoting Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 353 (1989)). "A mere listing of mitigation measures is insufficient to qualify as the reasoned discussion required by NEPA." *Northwest Indian Cemetery Protective Association v. Peterson*, 795 F.2d 688, 697 (9th Cir. 1986), *rev'd on other grounds*, 485 U.S. 439 (1988).
> * * *
> It is also not clear whether any mitigating measures would in fact be adopted. Nor has the Forest Service provided an estimate of how effective the mitigation measures would be if adopted, or given a reasoned explanation as to why such an estimate is not possible. … The Forest Service's broad generalizations and vague references to mitigation measures … do not constitute the detail as to mitigation measures that would be undertaken, and their effectiveness, that the Forest Service is required to provide.

Neighbors of Cuddy Mountain v. U.S. Forest Service, 137 F.3d 1372, 1380-81 (9th Cir. 1998).

> Federal regulations define "mitigation" as a way to avoid, minimize, rectify, or compensate for the impact of a potentially harmful action. 40 CFR §§ 1508.20(a)-(e). ... In order to be effective, a mitigation measure must be supported by analytical data demonstrating why it will "constitute an adequate buffer against the negative impacts that may result from the authorized activity." **The proposed monitoring program fails this test, as it could detect impacts only after they have occurred.** [The agency's] statement that it would reserve the authority to modify approved operations does not provide enough protection under this standard. A court must be able to review, in advance, how specific measures will bring projects into compliance with environmental standards. *See Nat'l Parks & Conservation Ass'n v. Babbitt*, 241 F.3d 722, 733 ("The Parks Service proposes to increase the risk of harm to the environment and then perform its studies.... This approach has the process exactly backwards."). **Monitoring may serve to confirm the appropriateness of a mitigation measure, but that does not make it an adequate mitigation measure in itself.**

Alaska Wilderness League v. Kempthorne, 548 F.3d 815, 827-828 (9th Cir. 2008)(emphasis

added).

NEPA requires that the relevant information necessary for an agency to demonstrate compliance with NEPA be included in an environmental impact statement, and not in additional documents outside of NEPA's public comment and review procedures. See, *Massachusetts v. Watt*, 716 F.2d 946, 951 (1st Cir. 1983) ("[U]nless a document has been publicly circulated and available for public comment, it does not satisfy NEPA's EIS requirements."); *Village of False Pass v. Watt*, 565 F. Supp. 1123, 1141 (D. Alaska 1983), *aff'd sub nom Village of False Pass v. Clark*, 735 F.2d 605 (9th Cir. 1984) ("The adequacy of the environmental impact statement itself is to be judged solely by the information contained in that document. Documents not incorporated in the environmental impact statement by reference or contained in a supplemental environmental impact statement cannot be used to bolster an inadequate discussion in the environmental impact statement."); *Dubois v. U.S. Dept. of Agriculture*, 102F.3d1273, 1287 (1st Cir. 1996), *cert. denied sub nom; Loon Mountain Recreation Corp. v. Dubois*, 117 S. Ct. 2510 (1997)("Even the existence of supportive studies and memoranda contained in the administrative record but not incorporated in the EIS cannot 'bring into compliance with NEPA an EIS that by itself is inadequate.' . . . Because of the importance of NEPA's procedural and informational aspects, if the agency fails to properly circulate the required issues for review by interested parties, then the EIS is insufficient even if the agency's actual decision was informed and well-reasoned.") (*citations omitted*); *Grazing Fields Farm v. Goldschmidt*, 626 F.2d 1068, 1072 (1st Cir.1980) (even the existence of supportive studies and memoranda contained in the administrative record but not incorporated in the EIS cannot "bring into compliance with NEPA an EIS that by itself is inadequate.").

Last, "for contentions based on NEPA, such as the one at issue here, the burden shifts to the Staff, because the NRC, not the applicant, bears the ultimate burden of establishing

compliance with NEPA." *In re Calvert Cliffs 3 Nuclear Project, LLC* (Calvert Cliffs Nuclear Power Plant, Unit 3), LBP-12-17, 76 N.R.C. 71, 80 (2012); *In re Pac. Gas & Elec. Co.*, 67 N.R.C. 1, 13 (N.R.C. Jan. 15, 2008)("There is no genuine dispute that NEPA and AEA legal requirements are not the same [. . .] and NEPA requirements must be satisfied.").

2. National Historic Preservation Act

The federal courts have addressed the strict mandates of the National Historic Preservation Act:

> Under the NHPA, a federal agency must make a reasonable and good faith effort to identify historic properties, 36 C.F.R. § 800.4(b); determine whether identified properties are eligible for listing on the National Register based on criteria in 36 C.F.R. § 60.4; assess the effects of the undertaking on any eligible historic properties found, 36 C.F.R. §§ 800.4(c), 800.5, 800.9(a); determine whether the effect will be adverse, 36 C.F.R. §§ 800.5(c), 800.9(b); and avoid or mitigate any adverse effects, 36 C.F.R. §§ 800.8[c], 800.9(c). The [federal agency] must confer with the State Historic Preservation Officer ("SHPO") and seek the approval of the Advisory Council on Historic Preservation ("Council").

Muckleshoot Indian Tribe v. U.S. Forest Service, 177 F.3d 800, 805 (9th Cir. 1999). See also 36 C.F.R. § 800.8(c)(1)(v)(agency must "[d]evelop in consultation with identified consulting parties alternatives and proposed measures that might avoid, minimize or mitigate any adverse effects of the undertaking on historic properties and describe them in the EA.")

NHPA § 106 ("Section 106") requires federal agencies, prior to approving any "undertaking," such as this Project, to "take into account the effect of the undertaking on any district, site, building, structure or object that is included in or eligible for inclusion in the National Register." 16 U.S.C. § 470(f). Section 106 applies to properties already listed in the National Register, as well as those properties that may be eligible for listing. See *Pueblo of Sandia v. United States*, 50 F.3d 856, 859 (10th Cir. 1995). Section 106 provides a mechanism by which governmental agencies may play an important role in "preserving, restoring, and maintaining the historic and cultural foundations of the nation." 16 U.S.C. § 470.

If an undertaking is the type that "may affect" an eligible site, the agency must make a reasonable and good faith effort to seek information from consulting parties, other members of the public, and Native American tribes to identify historic properties in the area of potential effect. 36 C.F.R. § 800.4(d)(2). See also *Pueblo of Sandia*, 50 F.3d at 859-863 (agency failed to make reasonable and good faith effort to identify historic properties).

The NHPA also requires that federal agencies consult with any "Indian tribe ... that attaches religious and cultural significance" to the sites. 16 U.S.C. § 470(a)(d)(6)(B). Consultation must provide the tribe "a reasonable opportunity to identify its concerns about historic properties, advise on the identification and evaluation of historic properties, including those of traditional religious and cultural importance, articulate its views on the undertaking's effects on such properties, and participate in the resolution of adverse effects." 36 C.F.R. § 800.2(c)(2)(ii).

Apart from requiring that an affected Tribe be involved in the identification and evaluation of historic properties, the NHPA requires that "[t]he agency official shall ensure that the section 106 process is initiated early in the undertaking's planning, so that a broad range of alternatives may be considered during the planning process for the undertaking." 36 C.F.R. § 800.1(c) (emphasis added). The ACHP has published guidance specifically on this point, reiterating in multiple places that consultation must begin at the earliest possible time in an agency's consideration of an undertaking, even framing such early engagement with the Tribe as an issue of respect for tribal sovereignty. ACHP, Consultation with Indian Tribes in the Section 106 Review Process: A Handbook (November 2008), at 3, 7, 12, and 29.

Regarding respect for tribal sovereignty, the NHPA requires that consultation with Indian tribes "recognize the government-to-government relationship between the Federal Government and Indian tribes." 36 C.F.R. § 800.2(c)(2)(ii)(C). See also Presidential Executive Memorandum

entitled "Government-to-Government Relations with Native American Tribal Governments" (April 29, 1994), 59 Fed. Reg. 22951, and Presidential Executive Order 13007, "Indian Sacred Sites" (May 24, 1996), 61 Fed. Reg. 26771. The federal courts echo this principle in mandating all federal agencies to fully implement the federal government's trust responsibility. See *Nance v. EPA*, 645 F.2d 701, 711 (9th Cir. 1981)("any Federal Government action is subject to the United States' fiduciary responsibilities toward the Indian tribes").

B. Relief Granted the Tribe in Prevailing on Contentions 1A and 1B

The ASLB found that the FSEIS "has not adequately addressed the environmental effects of the Dewey-Burdock project on Native American cultural, religious, and historic resources, and the required meaningful consultation between the Oglala Sioux Tribe and the NRC Staff has not taken place." LPB-15-16 at 42. Despite this finding of violations and a lack of compliance with both NEPA and the National Historic Preservation Act, the Board nevertheless allowed the Record of Decision and the license itself to stand. Federal law prohibits such a result, as it is contrary to the statutory requirement that NEPA and the NHPA compliance precede and inform the agency action, which here, is the license to conduct operations and possess/dispose of 11e2 Byproduct Material. The Commission should exercise review over this important issue to ensure that its programs maintain compliance with federal statutory mandates.

NHPA Section 106 specifically requires that the NRC "shall, **prior to the approval** of the expenditure of any Federal funds on the undertaking or **prior to the issuance of any license**, as the case may be, take into account the effect of the undertaking...." 16 U.S.C. § 470(f)(emphasis added). Similarly, "[u]nder NEPA, each federal agency must prepare an Environmental Impact Statement ('EIS') **before taking** a 'major Federal action[] significantly affecting the quality of the human environment.' 42 U.S.C. § 4332(2)(C)." *New York v. NRC*, 681 F.3d 471, 476 (D.C. Cir. 2012), *accord*, 40 C.F.R. § 1500.1(b)("NEPA procedures must

ensure that environmental information is available to public officials and citizens **before** decisions are made and **before** actions are taken.")(emphasis added).

Given that the ASLB confirmed the NRC Staff failure to comply with NEPA and the NHPA with regard to consideration of impacts to cultural and historical resources of the Oglala Sioux Tribe, the proper remedy is that employed by the federal courts up a finding of a violation of NEPA: to vacate the decision and remand back to the agency for further proceedings necessary to achieve compliance. See *New York v. NRC*, 681 F.3d 471 (D.C. Cir. 2012). Here, where the licensed activity has not commenced and wastes requiring perpetual care have not been created, there is no legal or practical reason for the ASLB to keep a license in place where it has held that NRC Staff issued the license without compliance with NEPA and NHPA.

C. Contention 2: The FSEIS Fails to Include Necessary Information for Adequate Determination of Baseline Groundwater Quality

In its Partial Initial Decision dated April 30, 2015, the ASLB ruled in favor of NRC Staff and Powertech that the FSEIS presents an adequate analysis of baseline water quality conditions at the site. This determination constitutes an error of law in that the Board misapplied Commission precedent in *Hydro Resources, Inc.* (P.O. Box 777, Crownpoint, New Mexico 87313), CLI-06-1, 63 NRC 1, 6 (2006) by following, without detailed analysis, the ruling of another ASLB panel in *Strata Energy, Inc.*(Ross In Situ Recovery Uranium Project), LBP-15-3, 80 NRC ___ (Jan. 23, 2015).

Specifically, the ASLB misapplied the *Hydro Resources, Inc.* and *Strata* results to render ineffective both 10 C.F.R. § 51.45(b) requiring a scientifically defensible analysis of baseline water quality, and 10 C.F.R. Part 40, Appendix A, Criterion 5, requiring "complete" baseline data. The Board instead followed the NRC Staff and Powertech arguments that these provisions can be effectively supplanted by the post-licensing establishment of "pre-operational"

background quality associated with 10 C.F.R. Part 40, Appendix A, Criterion 7. *See* LBP-15-16 at 46-49, 53-54.

The ASLB committed legal error by endorsing the concept that baseline water quality can be established by "collection of groundwater quality data in a staggered manner" after the licensing process is complete and outside of the NEPA review. LPB-15-16 at 54. In agreeing with the NRC Staff and Powertech, the Board also adopted the NRC Staff's unsupportable legal position that "the EIS is sufficient as long as it adequately describes the process by which the monitoring data will be obtained" in the future. LPB-15-16 at 48. While additional data gathering in the future under Criterion 7 is contemplated under the NRC regulations, it is only for purpose of "confirming" the already "complete" baseline data required to be included as part of the application and analyzed in the NEPA document as per Criterion 5. See LPB-15-16 at 53, quoting *Hydro Resources, Inc.*, 63 NRC at 6. Establishing the baseline water quality after licensing presents substantial questions regarding NEPA and NRC regulation and policy.

The ASLB committed additional error and abused its discretion in endorsing the NRC Staff position that "it was unnecessary to account for past mining activity in its baseline water quality data." LPB-15-16 at 48. The Board even ignored evidence from the EPA Preliminary Assessment (Exhibit OST-026)(ML14311B007) confirming the lack of meaningful data as to the impacts associated with historic mining at the site and how that impacts current water quality and future impacts from the Dewey-Burdock project. *Id.* at 55.

Lastly, the ASLB abused its discretion by ignoring the Tribe's argument, based on evidence in the record, that NRC Staff's reliance on NRC Regulatory Guide 4.14 is unsupportable in the context of ISR mining. See LPB-15-16 at 46-47. NRC Regulatory Guide 4.14 is an outdated document, created in 1980, and applicable by its own terms only to conventional uranium mills. See Exhibit NRC-074. NRC Staff applied the Guide to establish

only a 2 kilometer boundary for collecting baseline water quality. The ASLB accepted this 2 kilometer limit despite unrebutted evidence in the record that the 2 kilometer radioactive plume "rule" is inapplicable to and unreliable in the context of ISR. LPB-15-16 at 52, *quoting* Exh. NRC-076 (recognizing that "uranium plumes…[e]xceed roughly 2km in length only in special cases e.g. where in situ leaching has been carried out."). The Board also conceded that despite unsupported assertions by NRC Staff witnesses that 2 kilometers is sufficient for ISR sites, it "was unable to find a specific mention of a 2 kilometer radius" in the NRC Staff exhibits. LPB-15-16 at 53 n. 284. As such, the Board's finding that NRC Staff properly relied on 35-year old, pre-UMTRCA, conventional milling guidance for setting 2 kilometer limits on baseline water quality data collection is not supported by the record and is an abuse of discretion.

Importantly for the Commission's consideration of this Petition, the ASLB's ruling presents internal NRC confusion that would benefit from Commission review of the important issues of establishing the proper baseline water quality at ISR facilities, for which the Commission has not promulgated NEPA-based regulations. The ASLB expressly recognized the ambiguity and lack of clarity presented by the regulations and staff guidance with respect to these matters. LPB-15-16 at 53. The Board also wrestled with the lack of clarity as to how the 10 C.F.R. Part 40, Appendix A Criteria is meant to apply to ISR operations. LPB-15-16 at 45. Similarly, the Board noted with emphasis the fact that key terms such as "baseline" and "background" are not defined with any precision in the 10 C.F.R. Part 40 regulations or Appendix A, nor in NUREG-1569 or NRC Regulatory Guide 4.14. The Commission should take this opportunity to attempt to resolve these long-standing and "substantial questions" involving gaps in the regulatory process, which create confusion and consternation in the affected public and the reviewing ASLB.

D. Contention 3: The FSEIS Fails to Include Adequate Hydrogeological Information to Demonstrate the Ability to Contain Fluid Migration and Assess Potential Impacts to Groundwater

In its Partial Initial Decision dated April 30, 2105 (LPB-15-16), the Board ruled that "[w]ith the condition that unplugged boreholes be located and properly abandoned, the FSEIS and the record in this proceeding include adequate hydrogeological information to demonstrate the ability to contain fluid migration and assess potential impacts to groundwater." LPB-15-16 at 75. However, the Board's ruling presents legal error and an abuse of discretion in that it acknowledges that no analysis was presented in the FSEIS or otherwise that details the impacts and effects associated with the abandoned boreholes on lixiviant migration and contamination. Nor does the FSEIS explain or provide other information to demonstrate the ability of the applicant to successfully identify and abandon thousands of boreholes, nor how these efforts would be undertaken and accomplished. Rather, the Board relies entirely on a license condition that simply requires Powertech to "attempt" to locate these problems while carrying out NRC-licensed activities and outside of any NEPA process. LPB-15-16 at 73. Commission review of ASLB conclusions and orders involving fluid containment is supported by the ASLB's express finding that "all parties acknowledge that thousands of historical boreholes penetrate the Dewey-Burdock site" and that "it is apparent that some boreholes on the site have not been adequately plugged" and are causing leakage within the supposedly confining layers. LPB-15-16 at 72.

The omission and inadequacy of NRC Staff analysis of leakage issues was confirmed during and after the hearing, and the ASLB deferral of the analysis necessary to an undetermined point in the future violates NEPA. As recognized by the ASLB, the Tribe specifically argued that "the FSEIS must discuss how old boreholes will be identified and explain the methodology that will be used to assess the effectiveness of plugging and abandonment." LPB-15-16 at 66, *citing* Oglala Sioux Tribe Statement of Position at 33 (ML14171A776). However, nowhere does

the ASLB address this argument in its ruling or identify any authority that contemplates how a future promise to "attempt" to identify and properly close and abandon boreholes could satisfy NEPA requirements. The Commission should review this issue, as it presents a fundamental gap in the analysis associated with the groundwater impacts associated with this in situ mining proposal, and the lack of any review during the NEPA process undermines the credibility of the NRC Staff's conclusions as to those impacts.

The ASLB erroneously upheld NRC Staff analyses that ignored impacts and risks posed by faults and fractures within the Dewey-Burdock area. Despite NRC Staff and Powertech positions throughout the proceedings, and within the FSEIS, that deny the presence of faults or fractures at the site, the Board correctly found the evidence demonstrates faults and fractures do exist at the site. LPB-15-16 at 71. The Board committed legal error by applying an inappropriate legal standard when it effectively placed the burden on the Tribe to demonstrate the impacts associated with these faults and fractures. *Id.*

The applicable standard under NEPA is the requirement that the NRC Staff bears the burden of proof to demonstrate that it took a "hard look" at the potential impacts within the FSEIS. Here, where NRC Staff and Powertech consistently denied even the presence of such faults and fractures, and the ASLB ruled that faults and fractures do exist, the NEPA documents lack the necessary "hard look" disclosing the effect and risks to ground water presented by these faults and fractures. The Commission should exercise its review to ensure that NRC Staff conducts its NEPA analyses in a credible manner, that the Board applies the proper standard of review, and to provide relief for NEPA violations confirmed by the ASLB's findings of fact.

E. Contention 6: The FSEIS Fails to Adequately Describe or Analyze Proposed Mitigation Measures

In its April 30, 2015 Partial Initial Decision (LPB-15-16), the ASLB found that "the FSEIS adequately describes proposed mitigation measures" and found for NRC Staff and

Powertech on Contention 6. However, the Board's analysis contains legal error and constitutes abuse of discretion as it is internally inconsistent and fails to address several of the arguments presented by the Tribe. The Commission should exercise its discretion to review this issue due to the extensive use of mitigation by NRC Staff to manage impacts associated with ISR projects, including the Dewey-Burdock project. Further, NRC Staff's pervasive reliance on license conditions and future, undeveloped plans to mitigate impacts, yet failing to include a description, let alone and analysis of these measures and their effectiveness, represents a departure from and contrary to established law and an important issue of policy.

In this case, the Tribe asserted significant analytical gaps in the agency's review of mitigation measures. LPB-15-16 at 86-87. A principal concern was the Tribe's assertion of a lack of adequate analysis of mitigation for impacts to cultural resources. *Id.* at 90. Specifically, the Tribe argued that the reliance on wholly future development of mitigation measures through a process described in a Programmatic Agreement was not compliant with NEPA. *Id.* The Board ruled that the finalization of a Programmatic Agreement after the FSEIS was completed but before the Record of Decision was finalized was not itself a violation of NEPA, but failed to address the Tribe's argument that the failure to specify any actual mitigation in the Programmatic Agreement, other than an intent to design them in the future, also violated NEPA's requirement that mitigation be discussed in a FSEIS. *Id.* at 92-93. As a result, the Board ruled in favor of the NRC Staff and Powertech on Contention 6.

The ASLB correctly held earlier in its ruling, in association with Contention 1A, that "[b]ecause the cultural, historical, and religious sites of the Oglala Sioux Tribe have not been adequately catalogued, the FSEIS does not include mitigation measures sufficient to protect this Native American tribe's cultural, historical, and religious sites that may be affected by the Powertech project" and that "NEPA's hard look requirement has not been satisfied, and

potentially necessary mitigation measures have not been established." LPB-15-16 at 40. See also OST Post-Hearing Initial Brief with Findings of Fact and Conclusions of Law at 68-69 ("OST COL")(ML15010A048)(detailing repeated admissions by NRC Staff of its reliance on entirely future efforts to develop mitigation for cultural resource impacts). Thus, despite an express finding that the FSEIS lacked sufficient discussion of mitigation measures specifically with regard to cultural resources, the ASLB nevertheless ruled in favor of NRC Staff and Powertech on Contention 6. Such a ruling is internally inconsistent, contrary to established law, and an abuse of discretion warranting Commission review.

The ASLB's ruling also substantially ignores the Tribe's arguments regarding other mitigation issues, which are also not described or sufficiently analyzed in the FSEIS. The Tribe had contested the reliance on mitigation measures to be designed based on as-yet unreviewed plans including: an admittedly still "Draft" Avian Plan (OST COL at 65 (ML15010A048); the unsubmitted post-hearing pump-test and hydrologic well-field packages (*id.* at 64), waste land application mitigation plans (*id.* at 64), borehole plugging and abandonment plans (*id.* at 69), monitoring network plans (*id.* at 70), air impacts (*id.* at 71), "BMP's" for stormwater control (*id.* at 71), and a list of others specifically identified by the Tribe (*id.* at 71-72)(providing bullet list of specific mitigation measures deferred for development until after the FSEIS and license are final). As such, the Commission should exercise review on this issue.

IV. CONCLUSION

Because the Tribe has shown "substantial questions" this request for Commission review should be granted.

Respectfully Submitted,

/s/ Jeffrey C. Parsons

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Attorneys for Oglala Sioux Tribe

Dated at Lyons, Colorado
this 26th day of May, 2015

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of	)	
	)	
POWERTECH (USA) INC.,	)	Docket No. 40-9075-MLA
	)	ASLBP No. 10-898-02-MLA-BD01
(Dewey-Burdock In Situ Uranium Recovery Facility)	)	
	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Petition for Review in the captioned proceeding were served via the Electronic Information Exchange ("EIE") on the 26th day of May 2015, and via email to those parties for which the Board has approved service via email, which to the best of my knowledge resulted in transmittal of same to those on the EIE Service List for the captioned proceeding.

/s/ signed electronically by

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ATTACHMENT 2

NRC FORM 374

U.S. NUCLEAR REGULATORY COMMISSION

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and the applicable parts of Title 10, Code of Federal Regulations, Chapter I, Parts 19, 20, 30, 31, 32, 33, 34, 35, 36, 39, 40, 70, and 71, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee	
1. Powertech (USA) Inc. 2. 5575 DTC Parkway, Suite 140 Greenwood Village, CO 80111	3. License Number SUA-1600 4. Expiration Date April 8, 2024 5. Docket No. 40-09075 Reference No.

6. Byproduct Source, and/or Special Nuclear Material	7. Chemical and/or Physical Form	8. Maximum amount that Licensee May Possess at Any One Time Under This License
a. Natural Uranium b. Byproduct material as defined in 10 CFR 40.4	Any Unspecified	a. Unlimited b. Quantity generated under operation authorized by this license

SECTION 9: Administrative Conditions

9.1 The authorized place of use shall be the licensee's Dewey-Burdock Project in Fall River and Custer Counties, South Dakota. The licensee shall conduct operations within the license boundaries shown in Figure 1.4-1 of the approved license application.

9.2 The licensee shall conduct operations in accordance with the commitments, representations, and statements contained in the license application dated February 28, 2009 (Accession No. ML091200014), which is supplemented by the submittals dated August 10, 2009 (Accession No. ML092870160); June 28, 2011 (Accession No. ML112071064); February 27, 2012 (Accession No. ML120620195); April 11, 2012 (Accession No. ML121030013); June 13, 2012 (Accession No. ML12173A038); June 27, 2012 (Accession No. ML12179A534); and October 19, 2012 (Accession No. ML12305A056). The approved application and supplements are, hereby, incorporated by reference, except where superseded by specific conditions in this license. The licensee must maintain at least one copy of its complete, updated, and approved license application at the licensed facility. Unless otherwise specified, all references to the "license application" refer to the current, updated application including updates made per License Condition (LC) 9.4.

Whenever the words "will" or "shall" are used in the above referenced documents, it shall denote a requirement. The use of "verification" in this license with respect to a document submitted for NRC staff review means a written acknowledgement by U.S. Nuclear Regulatory Commission (NRC) staff that the specified submitted material is consistent with commitments in the approved license application, or requirements in a license condition or regulation. A verification will not require a license amendment.

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9.3 All written notices and reports sent to the U.S. Nuclear Regulatory Commission (NRC) as required under this license and by regulation shall be addressed as follows: ATTN: Document Control Desk, Director, Office of Federal and State Materials and Environmental Management Programs, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001. An additional copy shall be submitted to: Deputy Director, Decommissioning and Uranium Recovery Licensing Directorate, Division of Waste Management and Environmental Protection, Office of Federal and State Materials and Environmental Management Programs, U.S. Nuclear Regulatory Commission, Two White Flint North, 11545 Rockville Pike, Mail Stop T-8F5, Rockville, MD 20852-2738. Incidents and events that require telephone notification shall be made to the NRC Operations Center at (301) 816-5100 (collect calls accepted).

9.4 Change, Test, and Experiment License Condition

A) The licensee may, without obtaining a license amendment pursuant to 10 CFR 40.44, and subject to conditions specified in (B) of this condition:

i Make changes to the facility as described in the license application;

ii Make changes to the procedures as described in the license application; and

iii Conduct tests or experiments not described in the license application.

B) The licensee shall obtain a license amendment pursuant to 10 CFR 40.44 prior to implementing a proposed change, test, or experiment if the change, test, or experiment would:

i Result in more than a minimal increase in the frequency of occurrence of an accident previously evaluated in the license application;

ii Result in more than a minimal increase in the likelihood of occurrence of a malfunction of a facility structure, equipment, or monitoring system (SEMS) important to safety previously evaluated in the license application;

iii Result in more than a minimal increase in the consequences of an accident previously evaluated in the license application;

iv Result in more than a minimal increase in the consequences of a malfunction of an SEMS previously evaluated in the license application;

v Create a possibility for an accident of a different type than any previously evaluated in the license application;

vi Create a possibility for a malfunction of an SEMS with a different result than previously evaluated in the license application;

vii Result in a departure from the method of evaluation described in the license application (as updated) used in establishing the final safety evaluation report (FSER), environmental impact statement (EIS), environmental assessment (EA) or technical evaluation reports (TERs) or other analysis and evaluations for license amendments.

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viii For purposes of this paragraph as applied to this license, SEMS means any SEMS that has been referenced in a staff SER, TER, EA, or EIS and supplements and amendments thereof.

C) Additionally, the licensee must obtain a license amendment unless the change, test, or experiment is consistent with the NRC staff's previous conclusions, or the basis of or analysis leading to those conclusions, regarding actions, designs, or design configurations analyzed and selected in the site or facility SER, TER, and EIS or EA. This includes all supplements and amendments to the license, as well as all SERs, TERs, EAs, and EISs associated with amendments to this license.

D) The licensee's determinations concerning (B) and (C) of this condition shall be made by a Safety and Environmental Review Panel (SERP). The SERP shall consist of a minimum of three individuals. One member of the SERP shall have expertise in management (e.g., a Plant Manager) and shall be responsible for financial approval for changes; one member shall have expertise in operations and/or construction and shall have responsibility for implementing any operational changes; and one member shall be the radiation safety officer (RSO) or equivalent, with the responsibility of assuring changes conform to radiation safety and environmental requirements. Additional members may be included in the SERP, as appropriate, to address technical aspects such as groundwater or surface water hydrology, specific earth sciences, and other technical disciplines. Temporary members or permanent members, other than the three above-specified individuals, may be consultants.

E) The licensee shall maintain records of any changes made pursuant to this condition until license termination. These records shall include written safety and environmental evaluations made by the SERP that provide the basis for determining changes are in compliance with (B) of this condition. The licensee shall furnish, in an annual report to the NRC, a description of such changes, tests, or experiments, including a summary of the safety and environmental evaluation of each. In addition, the licensee shall annually submit to the NRC changed pages, which shall include both a change indicator for the area changed (e.g., a bold line vertically drawn in the margin adjacent to the portion actually changed) and a page change identification (date of change, change number, or both) for the operations plan and reclamation plan of the approved license application that reflects changes made under this condition.

9.5 Financial Assurance. The licensee shall maintain an NRC-approved financial surety arrangement, consistent with 10 CFR Part 40, Appendix A, Criterion 9, to adequately cover the estimated costs of decommissioning and decontamination, if accomplished by a third party. This surety arrangement shall cover offsite disposal of radioactive solid process or evaporation pond residues, and groundwater restoration pursuant to 10 CFR Part 40, Appendix A Criterion 5B (5). The surety shall also include the costs associated with all soil and water sampling analyses necessary to confirm the accomplishment of decontamination.

Proposed annual updates to the financial assurance amount, consistent with 10 CFR Part 40, Appendix A, Criterion 9, shall be provided to the NRC 90 days prior to the anniversary date. The financial assurance anniversary date for the Dewey-Burdock Project will be the date on which the first surety instrument is approved by the NRC. If the NRC has not approved a proposed revision

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30 days prior to the expiration date of the existing financial assurance arrangement, the licensee shall extend the existing arrangement, prior to expiration, for 1 year. Along with each proposed revision or annual update of the financial assurance estimate, the licensee shall submit supporting documentation, showing a breakdown of the costs and the basis for the cost estimates with adjustments for inflation, maintenance of a minimum 15-percent contingency of the financial assurance estimate, changes in engineering plans, activities performed, and any other conditions affecting the estimated costs for site closure.

Within 90 days of NRC approval of a revised closure (decommissioning) plan and its cost estimate, the licensee shall submit, for NRC review and approval, a proposed revision to the financial assurance arrangement if estimated costs exceed the amount covered in the existing arrangement. The revised financial assurance instrument shall then be in effect within 30 days of written NRC approval of the documents.

At least 90 days prior to beginning construction associated with any planned expansion or operational change that was not included in the annual financial assurance update, the licensee shall provide, for NRC review and approval, an updated estimate to cover the expansion or change. The licensee shall also provide the NRC with copies of financial-assurance-related correspondence submitted to the U.S. Environmental Protection Agency, a copy of the U.S. Environmental Protection Agency's financial assurance review, and the final approved financial assurance arrangement. The licensee also must ensure that the financial assurance instrument, where authorized to be held by a State or other Federal agency, identifies the NRC-related portion of the instrument and covers the activities discussed earlier in this license condition. The basis for the cost estimate is the NRC-approved site decommissioning and reclamation plan and any NRC approved revisions to the plan. Reclamation and decommissioning cost estimates and annual updates should follow the outline in Appendix C, "Recommended Outline for Site-Specific In Situ Leach Facility Reclamation and Stabilization Cost Estimates," to NUREG-1569, "Standard Review Plan for In Situ Leach Uranium Extraction License Applications—Final Report."

The licensee shall continuously maintain an approved surety instrument for the Dewey-Burdock Project, in favor of the NRC except for plugging and abandoning of all Class III and Class V injection wells, which will be maintained in favor of the U.S. Environmental Protection Agency. The initial surety estimate shall be submitted for NRC staff review and approval within 90 days of license issuance, and the surety instrument shall be submitted for NRC staff review and approval 90 days prior to commencing operations. The initial surety estimate shall include a reasonable estimate for the duration of groundwater restoration based on current experiences at licensed ISR facilities. The licensee shall also calculate pore volumes based on the actual screen lengths of injection and production wells and not by ore zone thickness.

9.6 Release of surficially contaminated equipment, materials, or packages for unrestricted use shall be in accordance with the NRC guidance document "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses for Byproduct, Source, or Special Nuclear Material," (the Guidelines) dated April 1993 (ADAMS Accession No. ML003745526) or suitable alternative procedures approved by NRC prior to any such release.

Where surface contamination by both alpha- and beta-gamma-emitting nuclides exists, the limits established for alpha- and beta-gamma-emitting nuclides shall apply independently.

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Personnel performing contamination surveys for items released for unrestricted use shall meet the qualifications for health physics technicians or radiation safety officers defined in Regulatory Guide 8.31 (as revised). Personal effects (e.g., notebooks and flash lights) which are hand carried need not be subjected to the qualified individual survey or evaluation, but these items should be subjected to the same survey requirements as the individual possessing the items.

Regulatory Guide 8.30 (as revised), Table 2, shall apply to the removal to unrestricted areas of equipment, materials, or packages that have the potential for accessible surface contamination levels above background. The licensee shall submit to the NRC for review and written verification a contamination control program. The program shall provide sufficient detail to demonstrate how the licensee will maintain radiological controls over the equipment, materials, or packages that have the potential for accessible surface contamination levels above background, until they have been released for unrestricted use as specified in the Guidelines, and what methods will be used to limit the spread of contamination to unrestricted areas. The contamination control program shall demonstrate how the licensee will limit the spread of contamination when moving or transporting potentially contaminated equipment, materials, or packages (pumps, valves, piping, filters, etc.) from restricted or controlled areas through uncontrolled areas. The licensee shall receive written verification of the licensee's contamination control program from the NRC prior to implementing such a program in lieu of the recommendations in RG 8.30.

The licensee may identify a qualified designee(s) to perform surveys, associated with the licensee's contamination control program when moving or transporting potentially contaminated equipment, materials, or packages from restricted or controlled areas through uncontrolled areas and back into controlled or restricted areas. The qualified designee(s) shall have education, training, and experience, in addition to general radiation worker training, as specified by the licensee. The education, training, and experience required by the licensee for qualified designees shall be submitted to the NRC for review and written verification. The licensee shall receive written verification of its qualified designee(s) training program from the NRC prior to its implementation.

9.7 The licensee shall follow the guidance set forth in the current versions of NRC Regulatory Guides 8.22, "Bioassay at Uranium Recovery Facilities," 8.30, "Health Physics Surveys in Uranium Recovery Facilities," and 8.31, "Information Relevant to Ensuring that Occupational Radiation Exposure at Uranium Recovery Facilities will be As Low As Is Reasonably Achievable (ALARA)" or NRC-approved equivalent measures.

9.8 Cultural Resources. Before engaging in any developmental activity not previously assessed by the NRC, the licensee shall administer a cultural resource inventory if such survey has not been previously conducted and submitted to the NRC. All disturbances associated with the proposed development will be completed in compliance with the National Historic Preservation Act (as amended) and its implementing regulations (36 CFR Part 800), as well as the Archaeological Resources Protection Act (as amended) and its implementing regulations (43 CFR Part 7).

In order to ensure that no unapproved disturbance of cultural resources occurs, any work resulting in the discovery of previously unknown cultural artifacts shall cease. The artifacts shall be inventoried and evaluated in accordance with 36 CFR Part 800, and no disturbance of the area shall occur until the licensee has received authorization from the NRC, the South Dakota State Historic Preservation Officer, and the Bureau of Land Management (if on Bureau of Land Management Land) to proceed.

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The licensee shall comply with the terms and conditions included in a Programmatic Agreement (PA) executed on April 7, 2014 (ADAMS Accession No. ML14066A344) that was developed to protect cultural resources within the Dewey-Burdock project boundary. If the PA is terminated, the licensee shall comply with Stipulation 16(c) of the PA. Therefore, in the event the PA is terminated, Powertech is required to follow the terms and conditions provided in the PA for on-going ground-disturbing activities, and is not permitted to begin ground-disturbing activities in unevaluated areas, until the NRC completes consultation and a new PA is executed, or the NRC has requested, taken into account, and responded to the comments of the ACHP under 36 CFR § 800.7(c)(4).

9.9 The licensee shall dispose of solid byproduct material from the Dewey-Burdock Project at a site that is licensed by the NRC or an NRC Agreement State to receive byproduct material. The licensee's approved solid byproduct material disposal agreement must be maintained on site. In the event that the agreement expires or is terminated, the licensee shall notify the NRC within seven working days after the date of expiration or termination. A new agreement shall be submitted for NRC staff review and written verification within 90 days after expiration or termination, or the licensee will be prohibited from further lixiviant injection.

9.10 The results of the following activities, operations, or actions shall be documented: sampling; analyses; surveys or monitoring; survey/ monitoring equipment calibrations; reports on audits and inspections; all meetings and training courses; and any subsequent reviews, investigations, or corrective actions required by NRC regulation or this license. Unless otherwise specified in a license condition or applicable NRC regulation, all documentation required by this license shall be maintained at the site until license termination, and is subject to NRC review and inspection.

9.11 The licensee is hereby exempted from the requirements of 10 CFR 20.1902(e) for areas within the facility, provided that all entrances to the facility are conspicuously posted with the words, "CAUTION: ANY AREA WITHIN THIS FACILITY MAY CONTAIN RADIOACTIVE MATERIAL."

SECTION 10: Operations, Controls, Limits, and Restrictions

Standard Conditions

10.1 The licensee shall use a lixiviant composed of native groundwater and a combination of carbon dioxide and gaseous oxygen, as specified in the approved license application.

10.2 Facility Throughput. The Dewey-Burdock Project throughput shall not exceed an average annual flow rate of 4,000 gallons per minute, excluding restoration flow. The annual production of yellowcake shall not exceed 1 million pounds.

10.3 At least 12 months prior to initiation of any planned final site decommissioning, reclamation, or groundwater restoration, the licensee shall submit a detailed decommissioning plan for NRC staff review and approval. The plan shall represent as-built conditions at the Dewey-Burdock Project.

10.4 The licensee shall have written standard operating procedures (SOPs) prior to operations for:

A) All routine operational activities involving radioactive and nonradioactive materials associated with licensed activities that are handled, processed, stored, or transported by employees;

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B) All routine nonoperational activities involving radioactive materials, including in-plant radiation protection, quality assurance for the respirator program, and environmental monitoring; and

C) Emergency procedures for potential accidents/unusual occurrences, including significant equipment or facility damage, pipe breaks and spills, loss or theft of yellowcake or sealed sources, significant fires, and other natural disasters.

The SOPs shall include appropriate radiation safety practices to be followed in accordance with 10 CFR Part 20. SOPs for operational activities shall enumerate pertinent radiation safety practices to be followed. Current copies of the SOPs shall be kept in the area(s) of the production facility where they are utilized. These SOPs are subject to inspection, including the preoperational inspection specified in LC 12.3.

10.5 Mechanical Integrity Tests (MITs). The licensee shall construct all wells in accordance with methods described in Sections 3.1.2.2 and 3.1.2.3 of the approved license application. The licensee shall perform well MITs on each injection and production well before the wells are utilized and on wells that have been serviced with down hole drilling or reaming equipment or procedures that could damage the well casing. Additionally, the licensee shall retest each well at least once every 5 years. The licensee shall perform MITs in accordance with Section 3.1.2.4 of the licensee's approved license application. Any failed well casing that cannot be repaired to pass the MIT shall be appropriately plugged and abandoned in accordance with Section 6.1.8 of the approved license application.

10.6 Groundwater Restoration. The licensee shall conduct groundwater restoration activities in accordance with Section 6.1 of the approved license application. Permanent cessation of lixiviant injection in a production area would signify the licensee's intent to shift from the principal activity of uranium recovery to the initiation of groundwater restoration and decommissioning for any particular production area. If the licensee determines that these activities are expected to exceed 24 months for any particular production area, the licensee shall submit an alternate schedule request that meets the requirements of 10 CFR 40.42.

Restoration Standards. Hazardous constituents in the groundwater shall be restored to the numerical groundwater protection standards required by 10 CFR Part 40, Appendix A, Criterion 5B(5). In submitting any license amendment application requesting review and approval of proposed alternate concentration limits (ACLs) pursuant to Criterion 5B(6), the licensee must show that it has first made practicable effort to restore the specified hazardous constituents to the background or maximum contaminant levels (whichever is greater).

Restoration Stability Monitoring. The licensee shall conduct sampling of all constituents of concern on a quarterly basis during restoration stability monitoring. The sampling shall include the specified production zone aquifer wells. The applicant shall continue the stability monitoring until the data show that the most recent four consecutive quarters indicate no statistically significant increasing trend for all constituents of concern that would lead to an exceedance above the respective standard in 10 CFR Part 40, Appendix A, Criterion 5B(5).

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Notwithstanding the LC 9.4 change process, the licensee shall not implement any changes to groundwater restoration or post-restoration monitoring plans without written NRC verification that the criteria in LC 9.4 do not require a license amendment. The licensee shall submit all changes to groundwater restoration or post-restoration monitoring plans to the NRC staff, for review and written verification, at least 60 days prior to commencement of groundwater restoration in a production area.

10.7 The licensee shall maintain a net inward hydraulic gradient at a wellfield as measured from the surrounding perimeter monitoring well ring starting when lixiviant is first injected into the production zone and continuing until initiation of the stabilization period.

10.8 The licensee is permitted to construct and operate storage and treatment ponds, as described in Section 4.2 of the approved license application. Routine pond inspections will be conducted consistent with inspection procedures described in Regulatory Guide 3.11.

10.9 The licensee shall establish and conduct an effluent and environmental monitoring program in accordance with those programs described in Section 5.7.8 and Section 5.7.7 of the approved license application.

Facility Specific Conditions

10.10 Hydrologic Test Packages.

A) Prior to principal activities in a new wellfield, the licensee shall submit a hydrologic test package to the NRC at least 60 days prior to the planned start date of lixiviant injection. The hydrologic test package for B-WF-1 or D-WF-1, whichever is developed first, will be submitted for review and written verification while the remaining hydrologic test packages will be submitted for NRC staff review except as described in paragraph B of this License Condition. In each hydrologic test data package, the licensee will document that all perimeter monitoring wells are screened in the appropriate horizon in order to provide timely detection of an excursion. Contents of a wellfield package shall include:

- A description of the proposed wellfield (location, extent, etc.).
- Map(s) showing the proposed production and injection well patterns and locations of all monitor wells.
- Geologic cross sections and cross section location maps.
- Isopach maps of the production zone sand and overlying and underlying confining units.
- Discussion of aquifer test procedures, including well completion reports.
- Discussion of the results and conclusions of aquifer tests, including raw data, drawdown match curves, potentiometric surface maps, water level graphs, drawdown maps and, when appropriate, directional transmissivity data and graphs.
- Sufficient information to show that wells in the monitor well ring are in adequate communication with the production patterns.
- All raw analytical data for Commission-approved background water quality.
- Summary tables of analytical data showing computed Commission-approved background water quality.
- Descriptions of statistical methods for computing Commission-approved background water quality.

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- Any other information pertinent to the proposed wellfield area tested will be included and discussed.

B) The licensee will submit, for NRC review and approval, hydrologic test packages for wellfields BWF-6, -7, and -8. No extraction will be permitted in these wellfields until the staff approves the hydrologic package. Hydrologic packages shall include all the information in paragraph A of this license condition and aquifer test results that address the partially unsaturated conditions of the Chilson Aquifer in these wellfields. These hydrologic packages will also contain a justification for well spacings in the monitoring well ring and overlying and underlying aquifers.

10.11 The licensee is prohibited from using the "glue and screw" method of joining well casings to construct any monitoring, injection, or production well.

10.12 If land application is utilized, the licensee will implement a pre operational and operational sampling plan, as discussed in Section 6.0 of the licensee's Groundwater Discharge Plan submitted to and per the conditions in its Groundwater Discharge Plan permit issued by the South Dakota Department of Environment and Natural Resources, until principal activities at the land application areas cease.

10.13 The licensee shall conduct radiological characterization of airborne samples for natural U, Th-230, Ra-226, Po-210, and Pb-210 for each restricted area air particulate sampling location at a frequency of once every 6 months for the first 2 years following issuance of the initial license, and annually thereafter to ensure compliance with 10 CFR 20.1204(g). The licensee shall also evaluate changes to plant operations to determine if more frequent radionuclide analyses are required for compliance with 10 CFR 20.1204(g).

10.14 The licensee shall ensure radiation safety training is consistent with the current versions of Regulatory Guide 8.13, "Instruction Concerning Prenatal Radiation Exposure," Regulatory Guide 8.29, "Instruction Concerning Risks from Occupational Radiation Exposure," and Section 2.5 of Regulatory Guide 8.31, or NRC-approved equivalent guidance.

SECTION 11: Monitoring, Recording, and Bookkeeping Requirements

Standard Conditions

11.1 In addition to reports required to be submitted to NRC or maintained on-site by Title 10 of the Code of Federal Regulations, the licensee shall prepare the following reports related to operations at the facility:

A) Quarterly reports that include a summary of excursion parameter concentrations, wells placed on or removed from excursion status, corrective actions taken, and the results obtained for all wells that were on excursion status during that quarter. These reports shall be submitted to NRC within 60 days following completion of the reporting period.

B) Semiannual reports that discuss the status of wellfields in operation (including last date of lixiviant injection), progress of wellfields in restoration and restoration progress, status of any long-term excursions, and a summary of MITs during the reporting period. These reports shall be submitted to NRC within 60 days following completion of the reporting period.

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C) Quarterly reports summarizing daily flow rates for each injection and production well and injection manifold pressures on the entire system. These reports shall be made available for inspection upon request.

D) Consistent with Regulatory Position 2 of Regulatory Guide 4.14, semiannual reports that summarize the results of the operational effluent and environmental monitoring program. The licensee shall submit these reports consistent with the terms of Regulatory Guide 4.14.

11.2 The licensee shall submit to the NRC the results of its annual review of its radiation protection program content and implementation performed in accordance with 10 CFR 20.1101(c). These results shall include an analysis of dose to individual members of the public consistent with 10 CFR 20.1301 and 10 CFR 20.1302.

11.3 Establishment of Commission-Approved Background Water Quality. Prior to injection of lixiviant in each production wellfield, as defined by the licensee, the licensee shall establish Commission-approved background groundwater quality data for the ore zone, overlying aquifers, underlying aquifers, alluvial aquifers (where present), and the perimeter monitoring areas. Commission-approved background sampling will be performed in accordance with Section 5.7.8 of the approved license application, and samples shall be analyzed for the parameters listed in Table 6.1-1 of the approved application. The licensee shall submit any revisions to its Commission-approved background water quality sampling plan to the NRC staff for review and approval.

11.4 Establishment of UCLs. Prior to injection of lixiviant into each production wellfield, as defined by the licensee, the licensee shall establish excursion parameters and their respective upper control limits (UCLs) in the designated overlying aquifer(s), underlying aquifer, and perimeter monitoring areas in accordance with Section 5.7.8 of the approved license application. Unless otherwise determined, the site-specific excursion parameters are chloride, conductivity, and total alkalinity. The UCLs shall be established for each excursion control parameter and for each well based on the mean plus five standard deviations of the data collected for LC 11.3. The UCL for chloride can be set at the sum of the background mean concentration and either (a) five standard deviations or (b) 15 mg/L, whichever sum provides the higher limit. The licensee shall submit any revisions to its plan for establishing UCLs to the NRC staff for review and approval.

11.5 Excursion Monitoring. Monitoring for excursions shall occur twice monthly, and no more than 14 days apart in any given month during operations, for all wells where UCLs have been established per Section 5.7.8 of the approved license application. If a designated monitor well is not sampled within 14 days of a previous sampling event, the reasons for this postponement shall be documented. Sampling shall not be postponed for more than 5 days.

If the concentrations of any two excursion indicator parameters exceed their respective UCL or any one excursion indicator parameter exceeds its UCL by 20 percent, the excursion criterion is exceeded and a verification sample shall be taken from that well within 48 hours after results of the first analyses are received. If the verification sample confirms that the excursion criterion is exceeded, the well shall be placed on excursion status. If the verification sample does not confirm that the excursion criterion is exceeded, a third sample shall be taken within 48 hours after the results of the verification sample are received. If the third sample shows that the excursion criterion is exceeded, the well shall be placed on excursion status. If the third sample does not show that the excursion criterion is exceeded, the first sample shall be considered an error and routine excursion monitoring will be resumed (the well is not placed on excursion status).

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Upon confirmation of an excursion, the licensee shall notify NRC, as discussed below, implement corrective action, and increase the sampling frequency for the excursion indicator parameters at the well on excursion status to at least once every 7 days. Corrective actions for confirmed excursions may be, but are not limited to, those described in Section 5.7.8 of the approved license application. An excursion is considered corrected when concentrations of all indicator parameters are below the concentration levels defining the excursion for three consecutive weekly samples.

If an excursion is not corrected within 60 days of confirmation, the licensee shall either (a) terminate injection of lixiviant within the wellfield until the excursion is corrected; or (b) increase the surety in an amount to cover the full third-party cost of correcting and cleaning up the excursion. The surety increase shall remain in force until the NRC has verified that the excursion has been corrected and remediated. The written 60-day excursion report shall identify which course of action the licensee is taking. Under no circumstances does this condition eliminate the requirement that the licensee remediate the excursion to meet groundwater protection standards as required by LC 10.6 for all constituents established per LC 11.3.

The licensee shall notify the NRC Project Manager (PM) by telephone or email within 24 hours of confirming a lixiviant excursion, and by letter within 7 days from the time the excursion is confirmed, pursuant to LC 11.6 and 9.3. A written report describing the excursion event, corrective actions taken, and the corrective action results shall be submitted to the NRC within 60 days of the excursion confirmation. For all wells that remain on excursion status after 60 days, the licensee shall submit a report as discussed in LC 11.1(A).

11.6 Until license termination, the licensee shall maintain documentation on unplanned releases of source or byproduct material (including process solutions) and process chemicals. Documented information shall include, but not be limited to, the date, spill volume, total activity of each radionuclide released, radiological survey results, soil sample results (if taken), corrective actions, results of postremediation surveys (if taken), a map showing the spill location and the impacted area, and an evaluation of NRC reporting criteria.

The licensee shall have written procedures for evaluating the consequences of the spill or incident/event against 10 CFR Part 20, Subpart M, "Reports," and 10 CFR 40.60 reporting criteria. If the criteria are met, the licensee shall report to the NRC Operations Center as required.

If the licensee must report any production area excursion or spill of source material, byproduct material, or process chemicals that may have an impact on the environment, or any other incident/event, to any State or other Federal agency, the licensee shall make a report to the NRC Headquarters Project Manager (PM) by telephone or electronic mail (e-mail) within 24 hours. In accordance with LC 9.3, this notification shall be followed, within 30 days of the notification, by submittal of a written report to NRC Headquarters detailing the conditions leading to the spill or incident/event, corrective actions taken, and results achieved.

Facility Specific Conditions

11.7 The licensee shall submit semi-annual reports that present the flow rates and volumes of liquid effluent discharged to Class V disposal wells and land application areas, influent flow rates into satellite and central processing plants, and bleed rates. The first report is due no later than 12 months after the start of operations, and shall account for all effluent discharges and inflows during the previous 12 months.

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11.8 After the initial land use update discussed in LC 12.15, every 12 months thereafter the licensee shall submit a land use update report for NRC staff review, until groundwater restoration and decommissioning are completed and approved by the NRC.

SECTION 12.0: Preoperational Conditions

Standard Conditions

12.1 Prior to commencement of operations in any production area, the licensee shall obtain all necessary permits, licenses, and approvals from the appropriate regulatory authorities. The licensee shall also submit a copy of all permits for its Class III and Class V underground injection wells to the NRC.

12.2 Prior to commencement of operations, the licensee shall coordinate emergency response requirements with local authorities, fire department, medical facilities, and other emergency services. The licensee shall document these coordination activities and maintain such documentation on-site.

12.3 The licensee shall not commence operations until the NRC performs a preoperational inspection to confirm, in part, that written operating procedures and approved radiation safety and environmental monitoring programs are in place, and that preoperational testing is complete. The licensee should notify the NRC, at least 90 days prior to the expected commencement of operations, to allow the NRC sufficient time to plan and perform the preoperational inspection.

12.4 The licensee shall identify the location, screen depth, and estimated pumping rate of any new groundwater wells or new use of an existing well within the license area and within 2 kilometers (1.25 miles) of any proposed wellfield boundary, as measured from the perimeter monitoring well ring, since the application was submitted to the NRC. The licensee shall evaluate the impact of ISR operations to potential groundwater users and recommend any additional monitoring or other measures to protect groundwater users. The evaluation shall be submitted to the NRC for review within 6 months of discovery of such well use.

12.5 Prior to commencement of operations, the licensee shall submit the qualifications of radiation safety staff members for NRC staff review and written verification.

12.6 Prior to commencement of operations, the licensee shall submit a copy of the solid byproduct material disposal agreement to the NRC.

Facility Specific Conditions

12.7 At least 60 days prior to construction, the licensee will propose in writing, for NRC review and written verification, a monitoring well network for the Fall River Aquifer in the Burdock area for those wellfields in which the Chilson Aquifer is the extraction zone.

12.8 The licensee will continue to collect additional meteorological data on a continuous basis at a data recovery rate of 90 percent until the data collected is determined by the NRC staff to be representative of long-term conditions. Justification of the similarity or validity of the data will include analysis of the statistical data presented to illustrate confidence in the representativeness of the data. The data collected shall include, at a minimum, wind speed, wind direction, and an annual wind rose. The submittal shall include a summary of the stability classification.

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12.9 The licensee shall submit preoperational surface water analytical data for the new surface water sampling locations to the NRC for review and written verification within 3 months of the initiation of operations. Surface water analytical data shall be of the same completeness (e.g. parameters, quality of analyses, and frequency) as the data provided in the licensee's June 2011 submittal (ADAMS Accession No. ML112071064).

12.10 Prior to commencement of operations, the licensee will collect four quarterly groundwater samples from each well within 2 km (1.25 mi) of the boundary of any wellfield, as measured from the perimeter monitoring well ring. This data shall be submitted to the NRC staff for review and written verification. Furthermore, all domestic, livestock, and crop irrigation wells within 2 km (1.25 mi) of the boundary of any wellfield, as measured from the perimeter monitoring well ring, will be included in the routine environmental sampling program provided that well owners consent to sampling and the condition of the wells renders them suitable for sampling.

12.11 No later than 30 days prior to construction, the licensee will provide additional statistical analysis of the soil sampling data and gamma measurements to establish sufficient statistical relationships. If such relationships are not sufficient for use at the site, additional procedures or data shall be submitted to the NRC staff for review and written verification.

12.12 No later than 30 days before the start of operations, the licensee shall provide the NRC staff, for review and written verification, its procedures for documenting the wellfield inspections. These procedures shall include the personnel tasked with performing these inspections, items to be inspected, criteria for determining upset conditions, and the manner in which the inspections will be documented.

12.13 No later than 30 days prior to the preoperational inspection, the licensee shall provide to the NRC staff, for review and written verification, its procedures for preparing logs of the dryer and emissions control system performance in accordance with 10 CFR Part 40, Appendix A, Criterion 8. The procedure shall include the manner in which logs for inspection will be produced and maintained at the Dewey-Burdock Project. These procedures shall also specify specific job functions or categories of personnel responsible for responding to malfunctions of the dryer and emissions control system and the manner in which such responsible persons are notified of malfunctions.

12.14 No later than 90 days before the start of operations, the licensee shall provide, for the NRC Staff review and written verification, the qualifications and training required for RSO designees for reviewing and issuing radiation work permits.

12.15 No later than 30 days before the start of operations, the licensee shall submit a report for NRC staff review updating land use descriptions within the Dewey-Burdock Project and within 2 miles of the license boundary. This report shall identify actual land use changes, new structures and the purpose, and new water supply wells and the purpose.

12.16 At least 30 days prior to the preoperational inspection, the licensee shall provide a list of its instrumentation to be used during operations, including the manufacturer, model number or a description, and the range of sensitivity of the radiation survey meters for measuring beta radiation. The licensee shall also provide a plan for conducting beta surveys in process areas.

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12.17 No later than 30 days before the preoperational inspection, the licensee shall submit to the NRC staff, for review and written verification, an acceptable method to ensure the soluble intake of uranium will be ALARA.

12.18 The licensee shall submit to the NRC staff for review and written verification the procedures by which it will ensure that unmonitored employees will not exceed 10 percent of the dose limits in 10 CFR Part 20, Subpart C.

12.19 The licensee shall prepare a bioassay QA/QC procedure that is consistent with Regulatory Guide 8.22. This procedure shall be made available for NRC staff review and written verification during the preoperational inspection.

12.20 No later than 30 days before the preoperational inspection, the licensee shall develop a survey program for beta-gamma contamination for personnel exiting from restricted areas that complies with the requirements of 10 CFR Part 20, Subpart F.

12.21 The licensee shall provide, for NRC staff review and written verification, the surface contamination detection capability (scan MDC) for radiation survey meters used for contamination surveys to release equipment and materials for unrestricted use and for personnel contamination surveys. The detection capability in the scanning mode for the alpha and beta-gamma radiation expected shall be provided in terms of dpm per 100 cm^2.

12.22 No later than 30 days before the preoperational inspection, the licensee shall provide to the NRC staff, for review and written verification, written procedures for its airborne effluent and environmental monitoring program that:

A. Discuss how, in accordance with 10 CFR 40.65, the quantity of the principal radionuclides from all point and diffuse sources will be accounted for in, and verified by, surveys and/or monitoring.

B. Evaluate the member(s) of the public likely to receive the highest exposures from licensed operations consistent with 10 CFR 20.1302.

C. Discuss and identify how radon (radon-222) progeny will be factored into analyzing potential public dose from operations consistent with 10 CFR Part 20, Appendix B, Table 2.

D. Discuss how, in accordance with 10 CFR 20.1501, the occupational dose (gaseous and particulate) received throughout the entire License Area from licensed operations will be accounted for, and verified by, surveys and/or monitoring.

12.23 Within 90 days of receipt of an NRC license, the licensee will submit to the NRC for review and approval a revised decommissioning, decontamination, and reclamation plan. The revised plan will include soil cleanup criteria for radionuclides other than radium based on the radium benchmark dose method, as well as procedures for monitoring beta-gamma contamination on equipment, structures, and material released for unrestricted use. The soil cleanup criteria, based on the radium benchmark dose methodology for U and other radionuclides, will demonstrate that residual radioactivity in soil meets the criteria in 10 CFR Part 40, Appendix A, Criterion 6(6). The revised plan will also include procedures for restoring stream channels to their original geomorphology.

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12.24 At least 60 days prior to the preoperational inspection, the licensee will submit a completed Quality Assurance Project Plan (QAPP) to the NRC for review to verify that the QAPP will be consistent with Regulatory Guide 4.15 (as revised).

12.25 No later than 60 days prior to construction, the licensee shall submit to the NRC for review and written verification, a pond detection monitoring plan that contains the number, locations, and screen depths of groundwater monitoring wells to installed around the Burdock area and Dewey area ponds. The plan shall also include sampling frequency and sampling parameters. Monitoring wells installed to comply with the licensee's Groundwater Discharge Permit issued by the State of South Dakota may be incorporated into this monitoring network.

FOR THE NUCLEAR REGULATORY COMMISSION

Date: 4/8/2014

/RA/
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Division of Waste Management
and Environmental Protection
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